FIGURE 1A

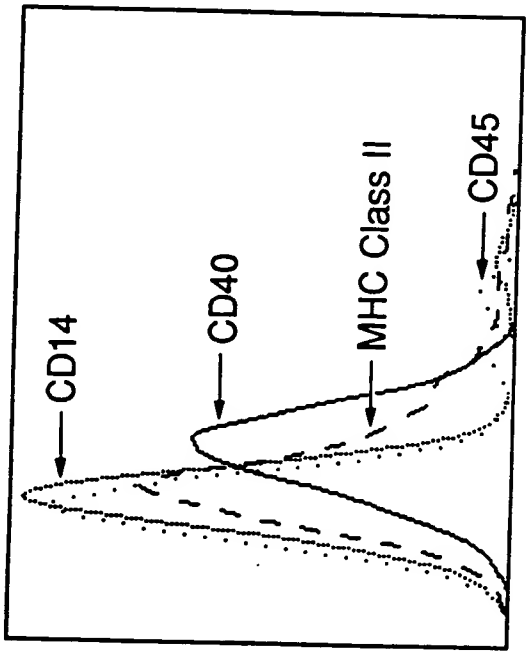


FIGURE 1B

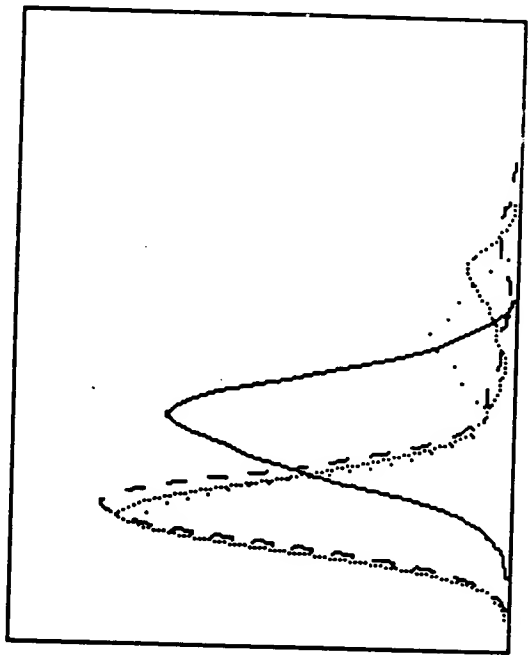


FIGURE 2A

Resting

FIGURE 2B

γ - INF

CCD
965 SK

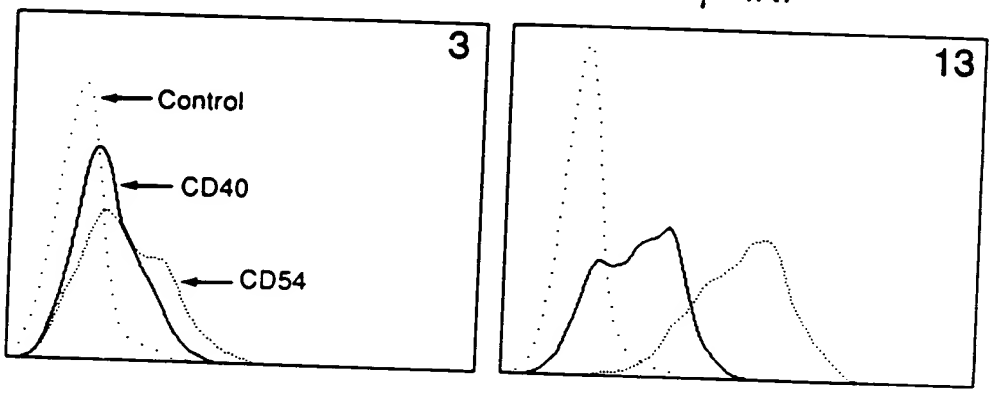


FIGURE 2C

FIGURE 2D

SK.1

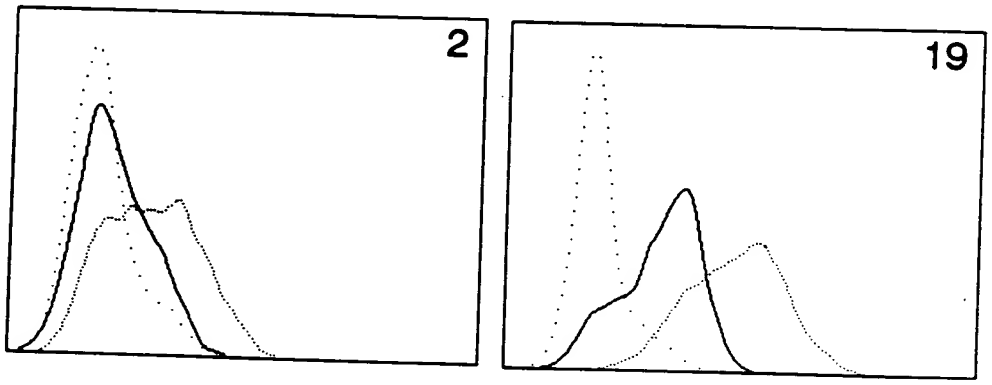


FIGURE 2E

FIGURE 2F

SK.2

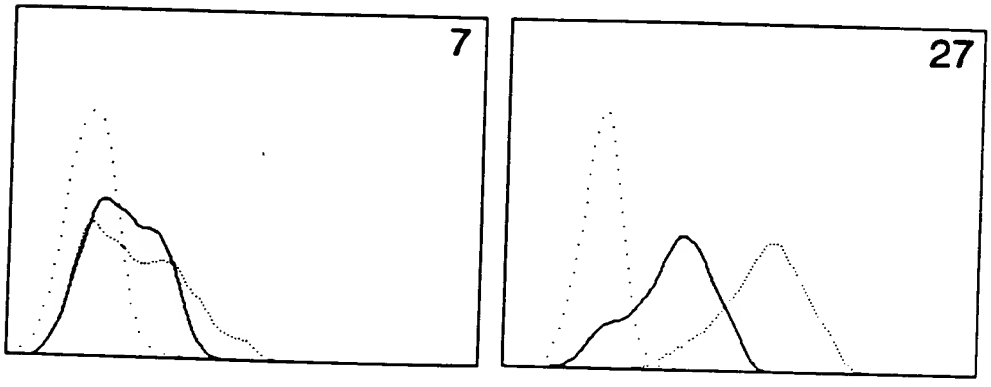
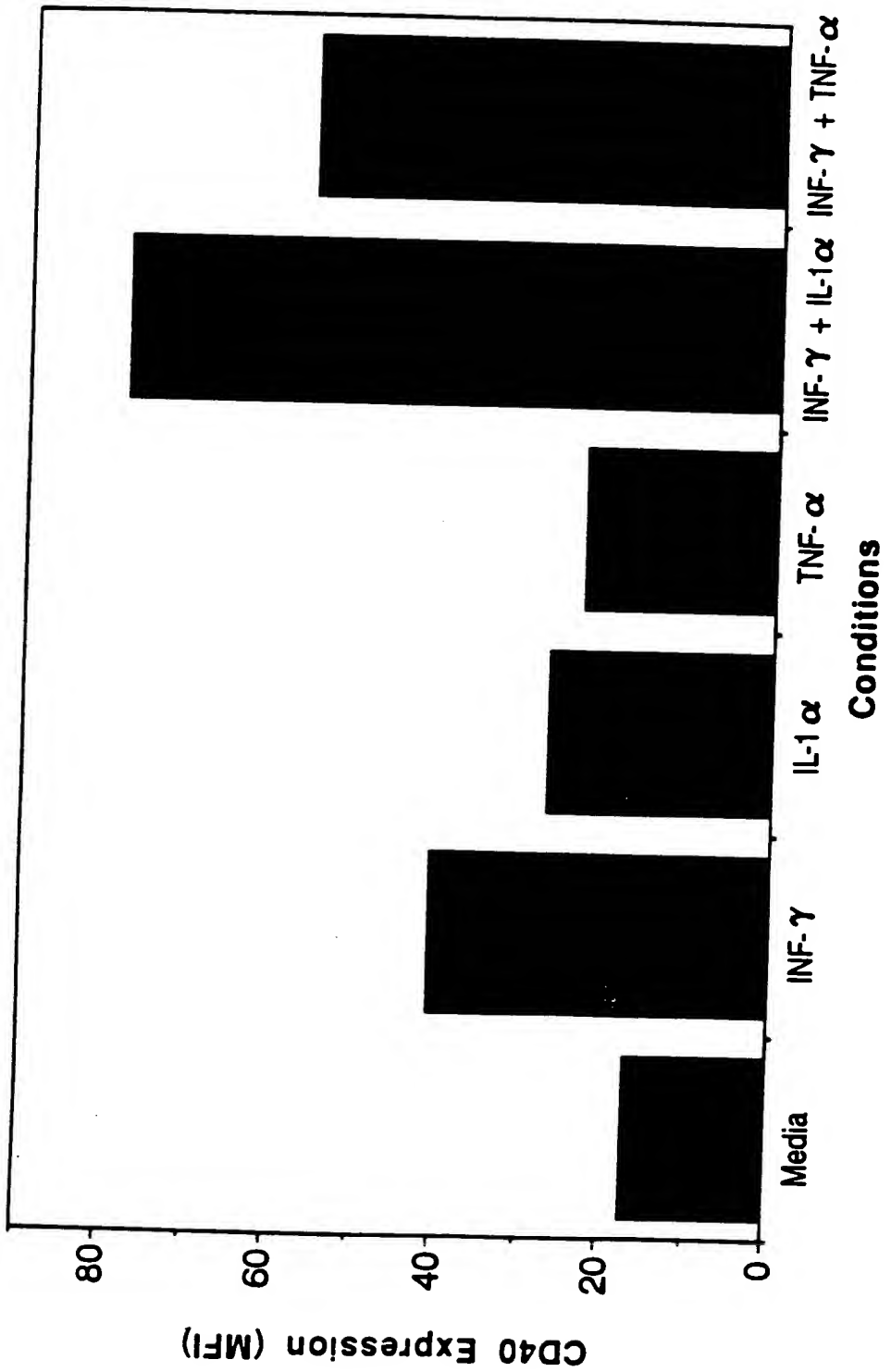


FIGURE 3


CD40 Expression (MFI)
0
20
40
60
80
Media
INF-γ
IL-1α
TNF-α
INF-γ + IL-1α
INF-γ + TNF-α
Conditions

IA.1 cells plus:

Media

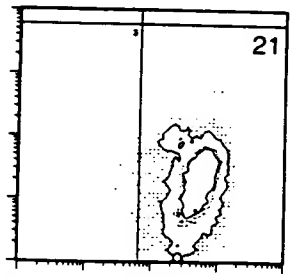


FIGURE 4A

D1.1

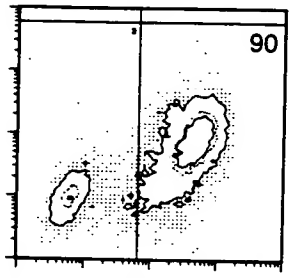


FIGURE 4B

D1.1
+
Anti-CD40L mAb

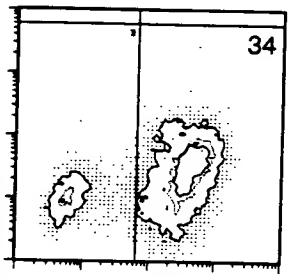


FIGURE 4C

D1.1
+
Isotype Control mAb

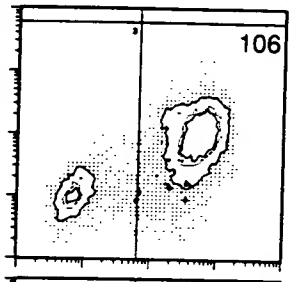


FIGURE 4D

B2.7

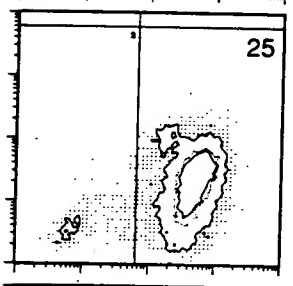


FIGURE 4E

INF-γ

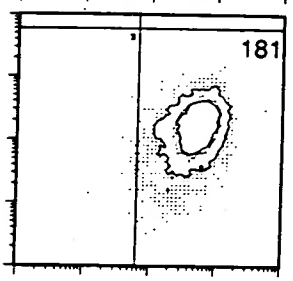


FIGURE 4F

CD54 Fluorescence

CD13 Fluorescence

FIGURE 5

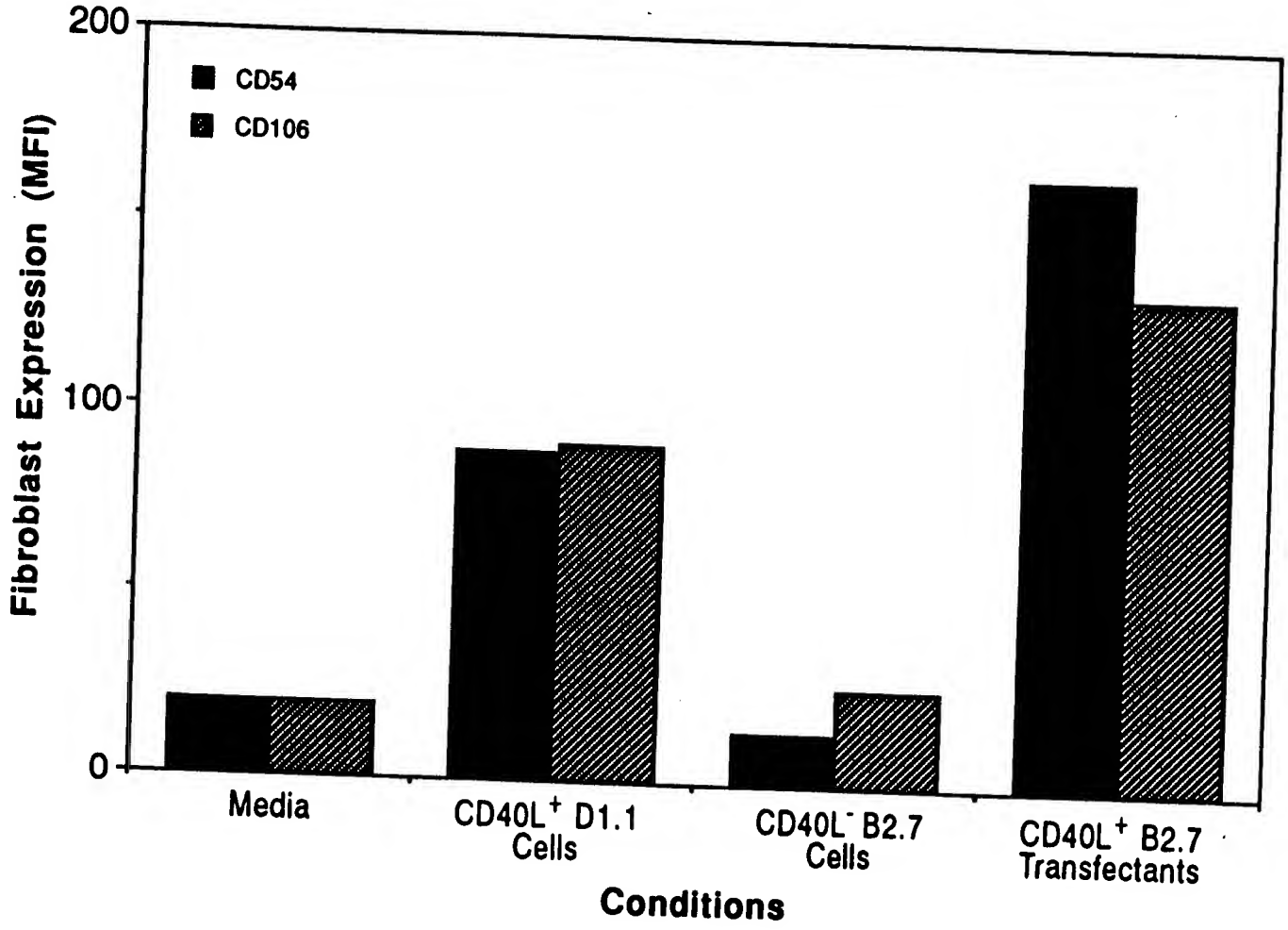

200
100
0
CD54
CD106
Fibroblast Expression (MFI)
Media
CD40L+ D1.1 Cells
CD40L- B2.7 Cells
CD40L+ B2.7 Transfectants
Conditions

FIGURE 6A

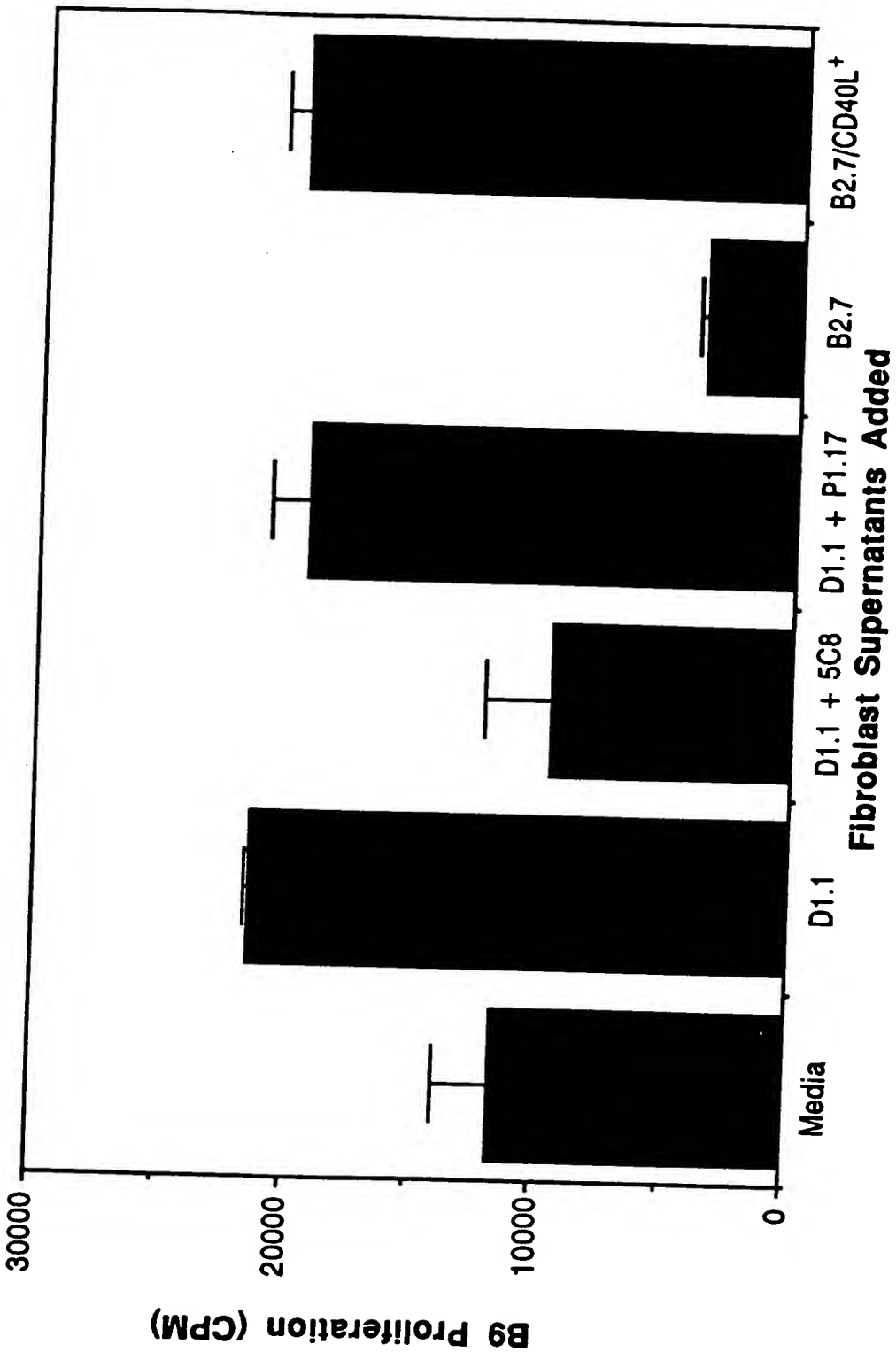

B9 Proliferation (CPM)
30000
20000
10000
0
Media
D1.1
D1.1 + 5C8
D1.1 + P1.17
B2.7
B2.7/CD40L+
Fibroblast Supernatants Added

FIGURE 6B

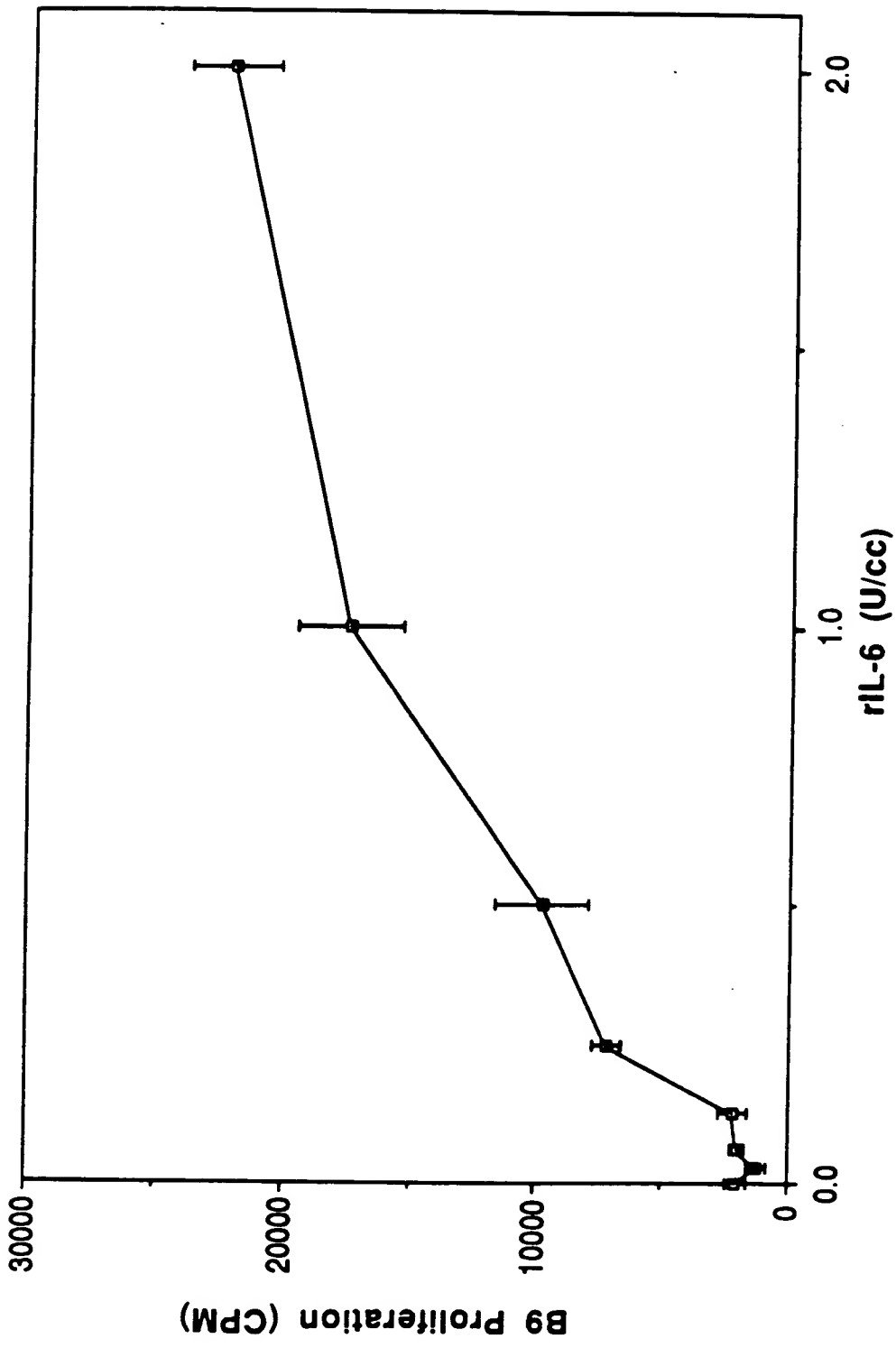


FIGURE 7

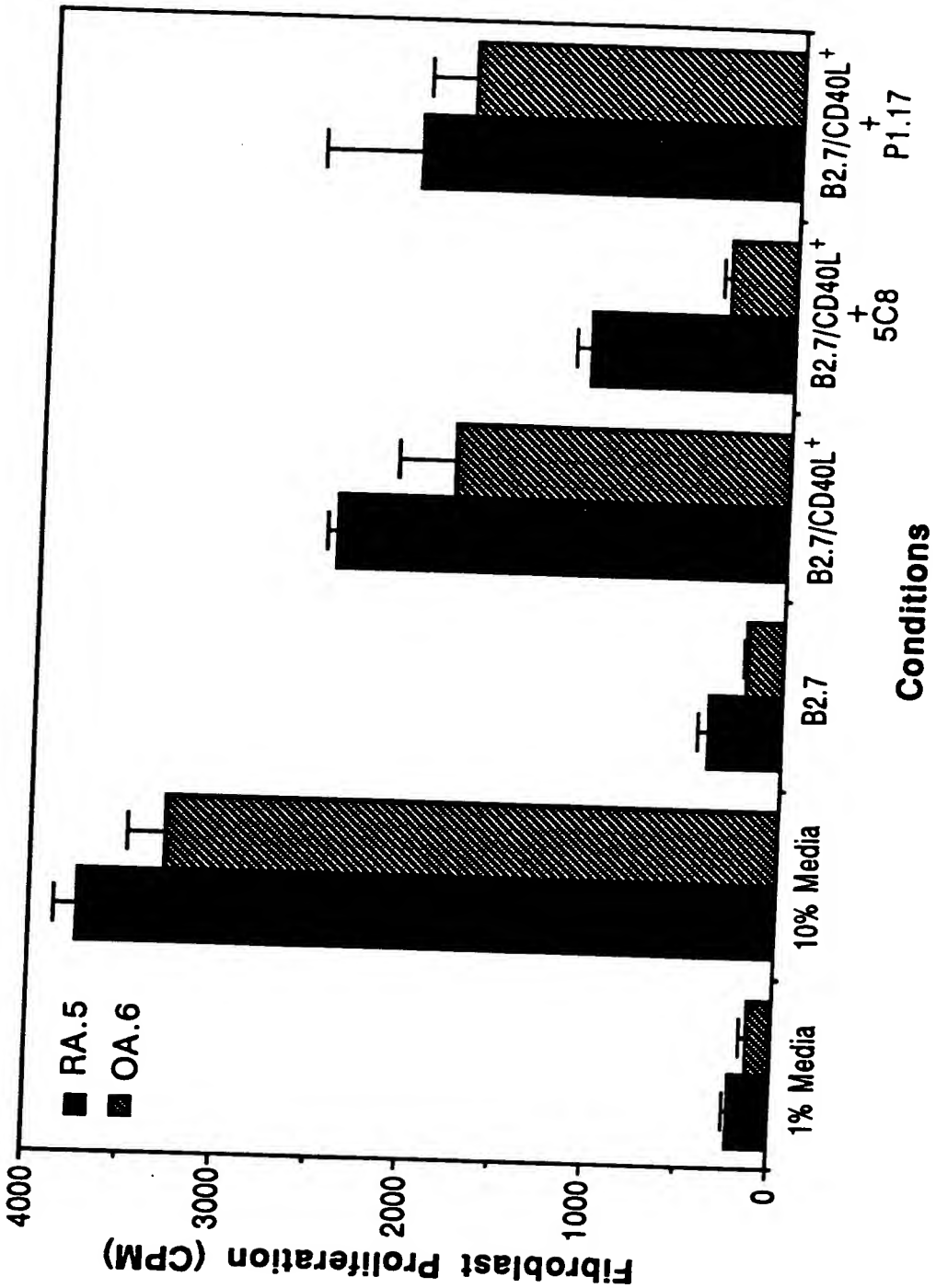
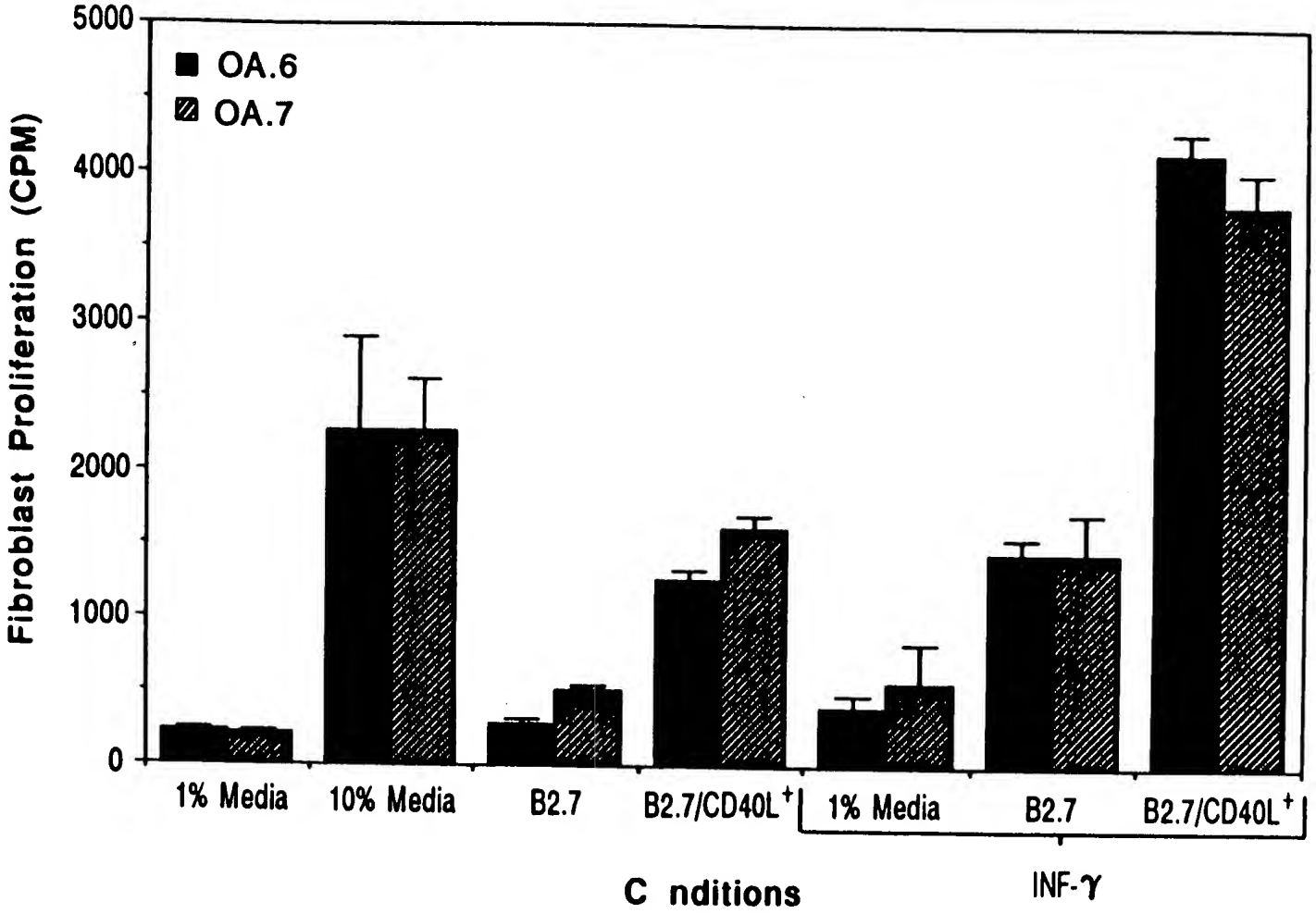

Fibroblast Proliferation (CPM)
4000
3000
2000
1000
0
RA.5
OA.6
1% Media
10% Media
B2.7
B2.7/CD40L+
B2.7/CD40L+ + 5C8
B2.7/CD40L+ + P1.17
Conditions

FIGURE 8


5000
4000
3000
2000
1000
0
OA.6
OA.7
Fibroblast Proliferation (CPM)
1% Media
10% Media
B2.7
B2.7/CD40L+
1% Media
B2.7
B2.7/CD40L+
C nditions
INF-γ

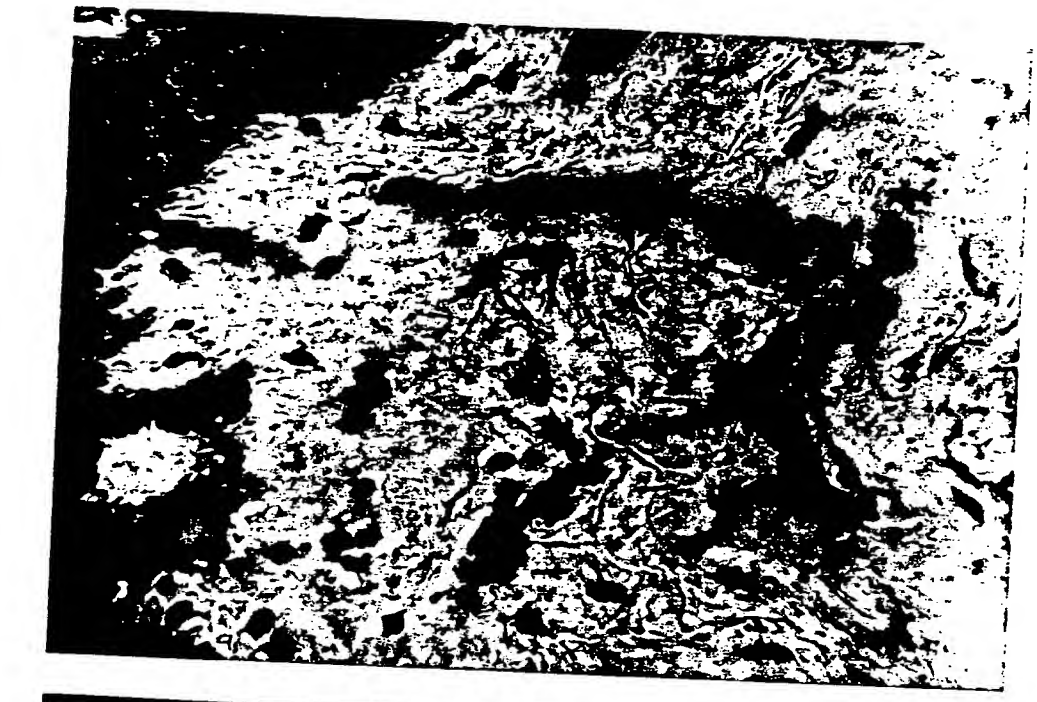


FIGURE 9B

FIGURE 9A

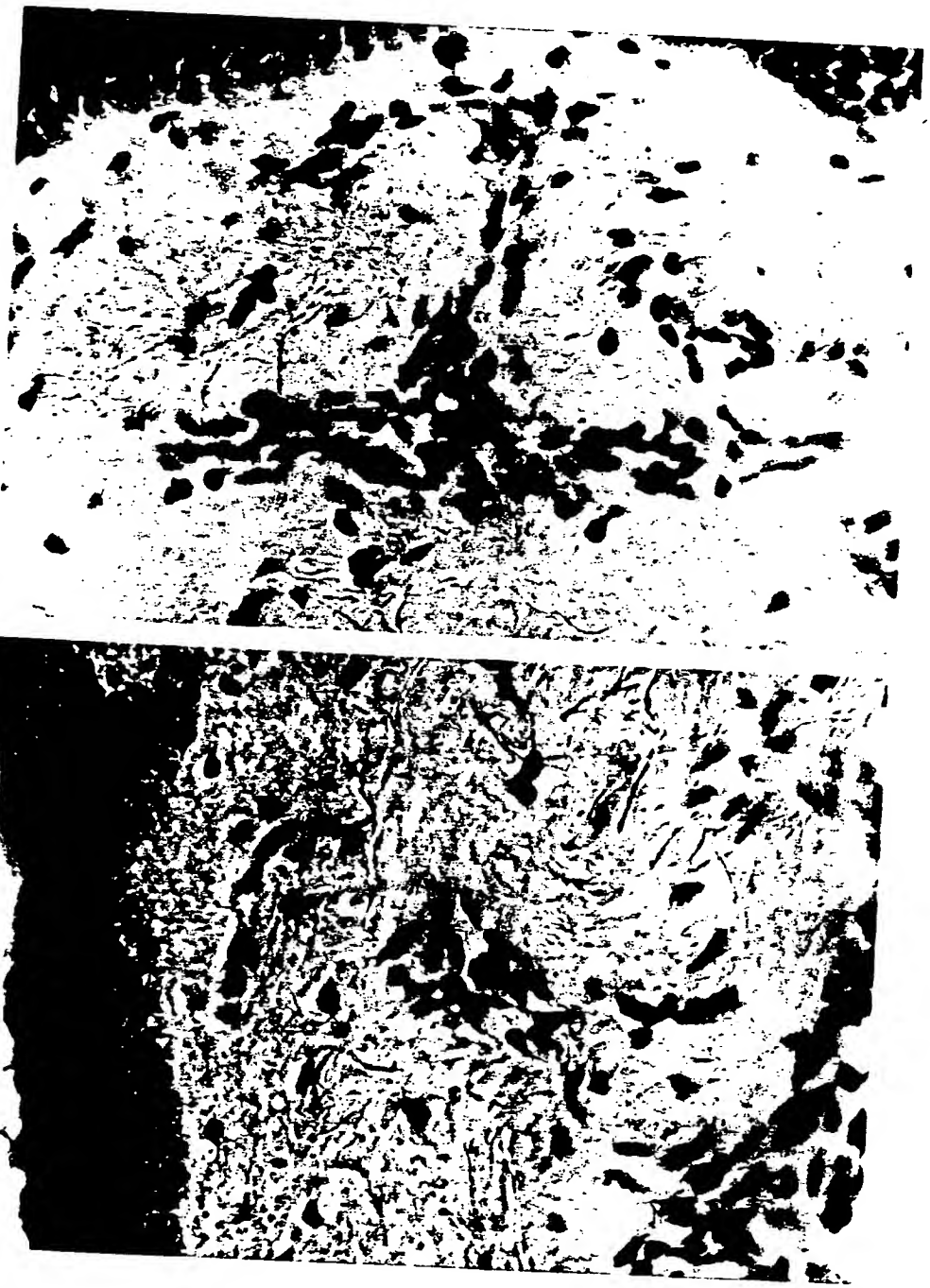


FIGURE 9D

FIGURE 9C

FIGURE 10B

FIGURE 10A

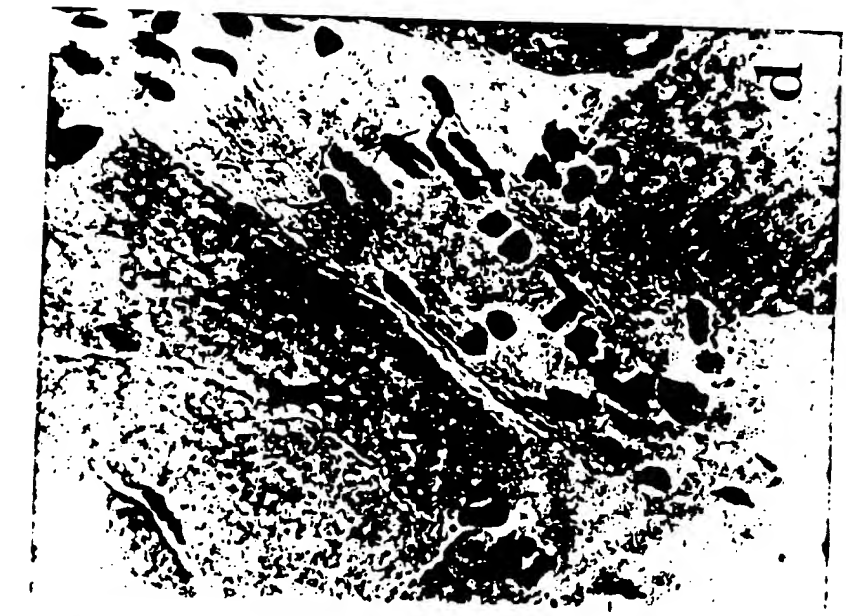


FIGURE 10D

FIGURE 10C

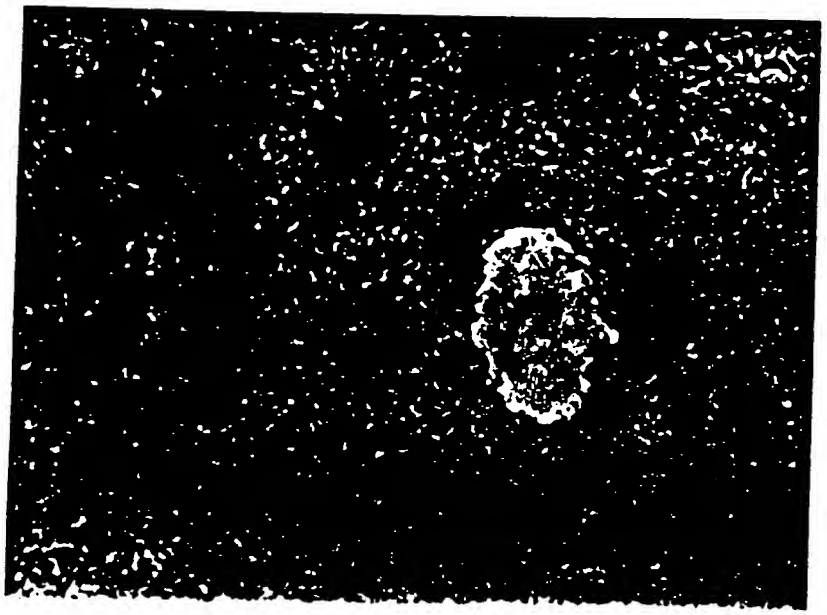
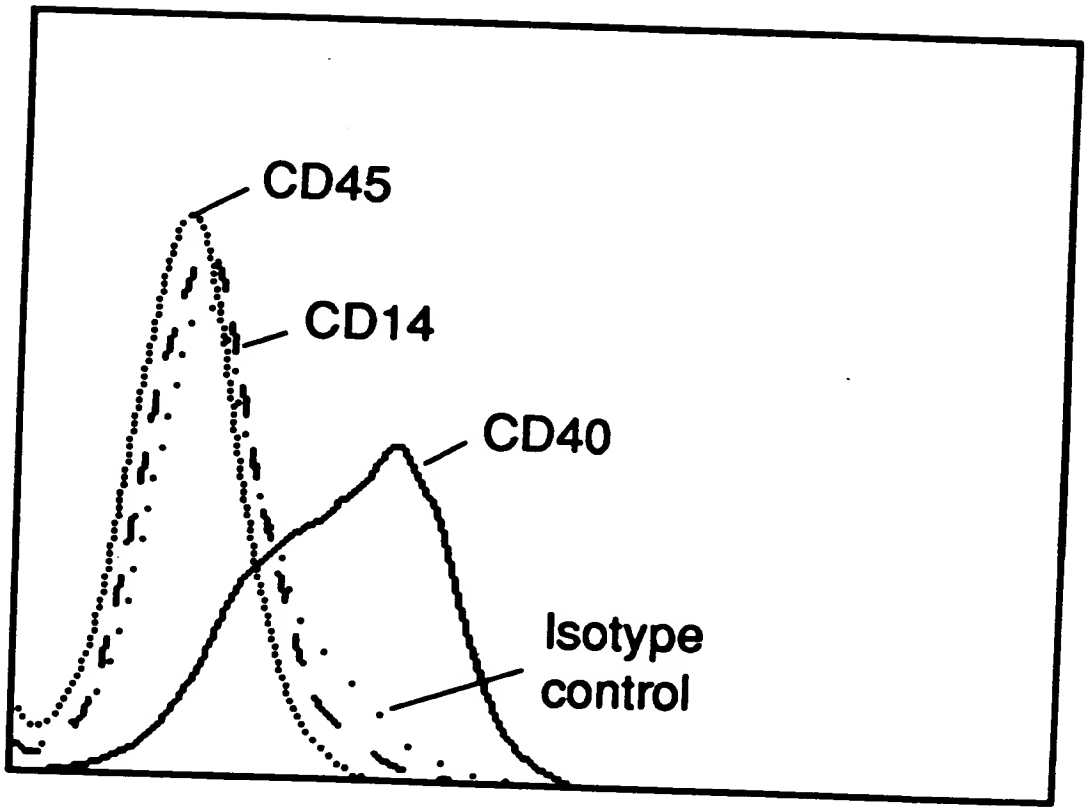


FIGURE 11B

FIGURE 11A

FIGURE 12



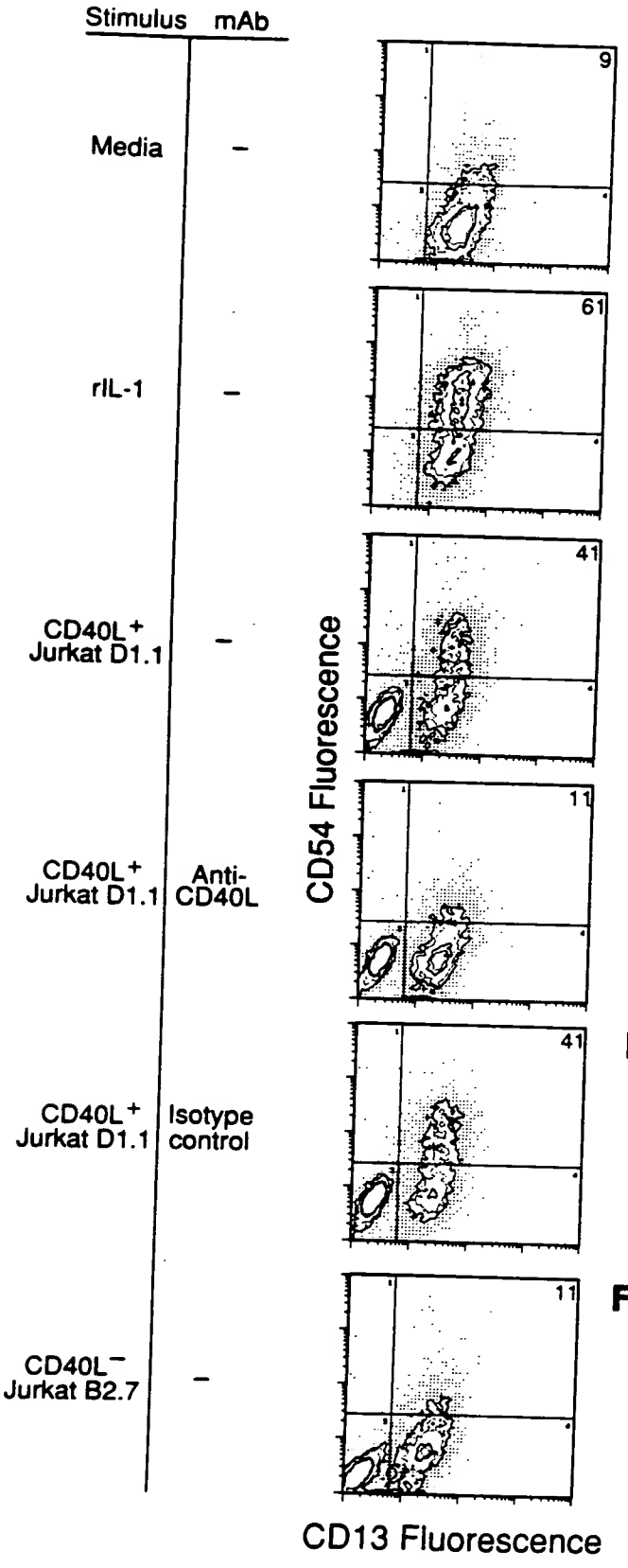


FIGURE 13A

FIGURE 13B

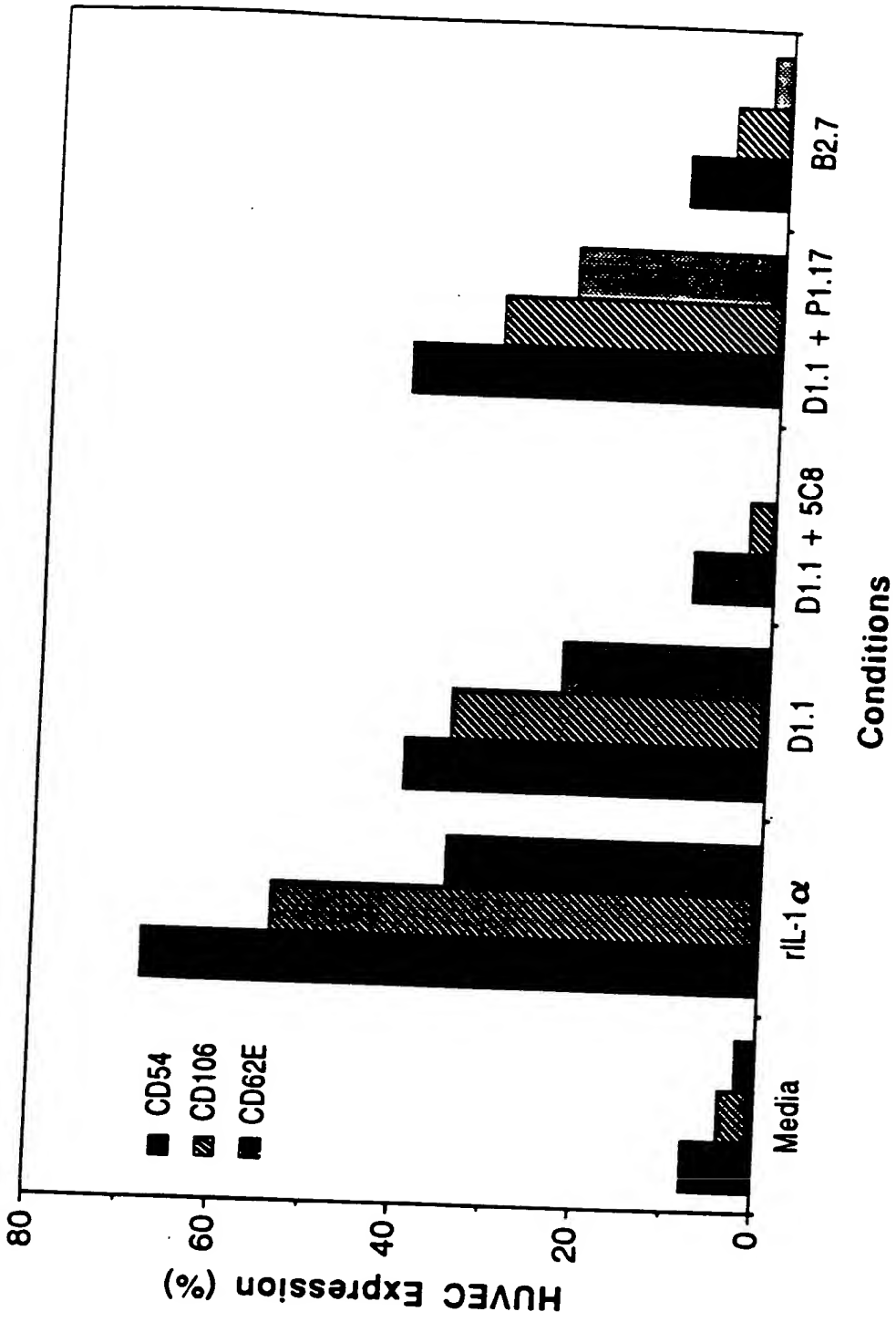
FIGURE 13C

FIGURE 13D

FIGURE 13E

FIGURE 13F

FIGURE 14


HUVEC Expression (%)
0
20
40
60
80
CD54
CD106
CD62E
Media
rIL-1α
D1.1
D1.1 + 5C8
D1.1 + P1.17
B2.7
Conditions

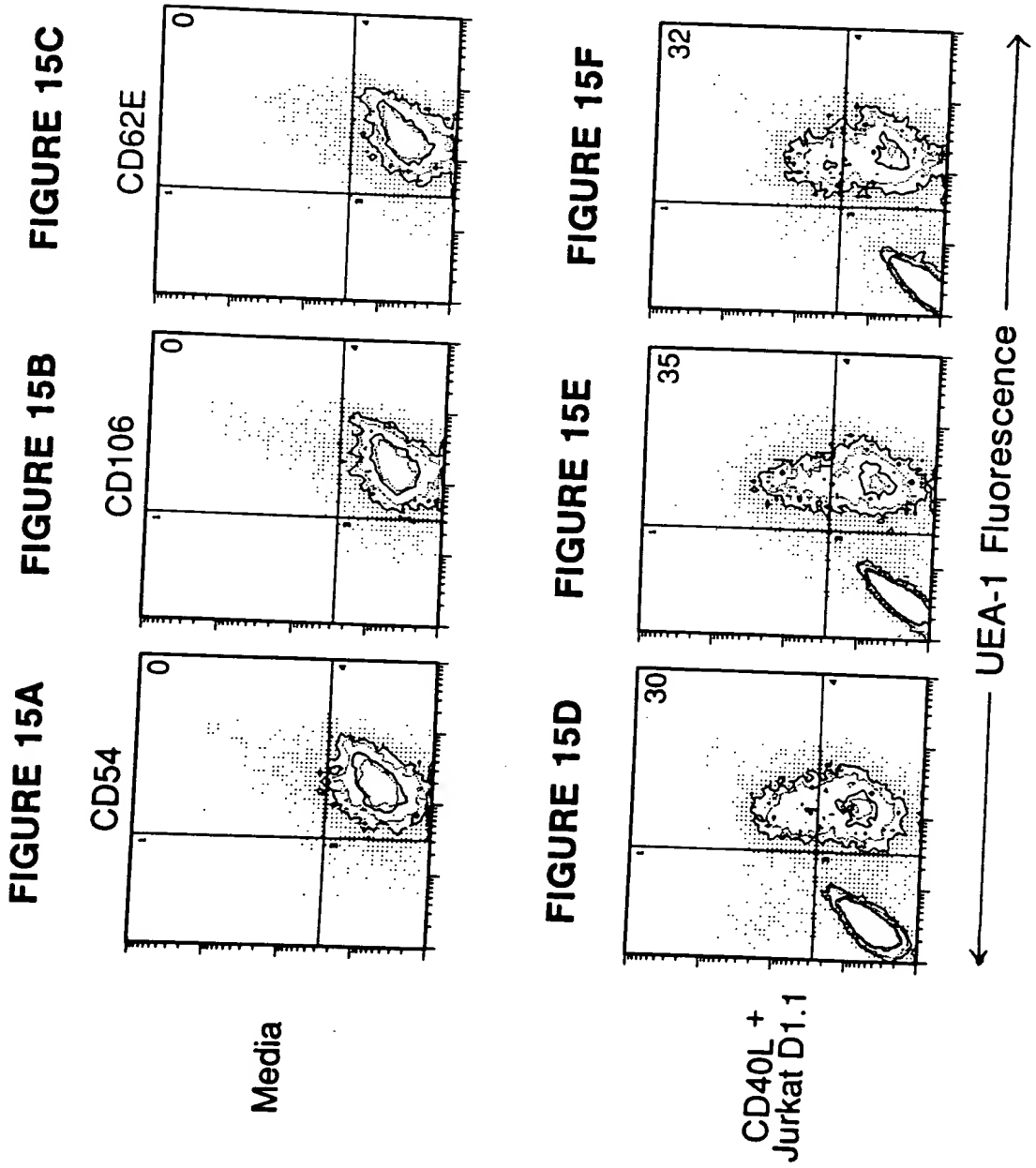


FIGURE 15A
FIGURE 15B
FIGURE 15C
FIGURE 15D
FIGURE 15E
FIGURE 15F
CD54
CD106
CD62E
Media
CD40L + Jurkat D1.1
0
0
0
30
35
32
UEA-1 Fluorescence

FIGURE 15G

FIGURE 15H

FIGURE 15I

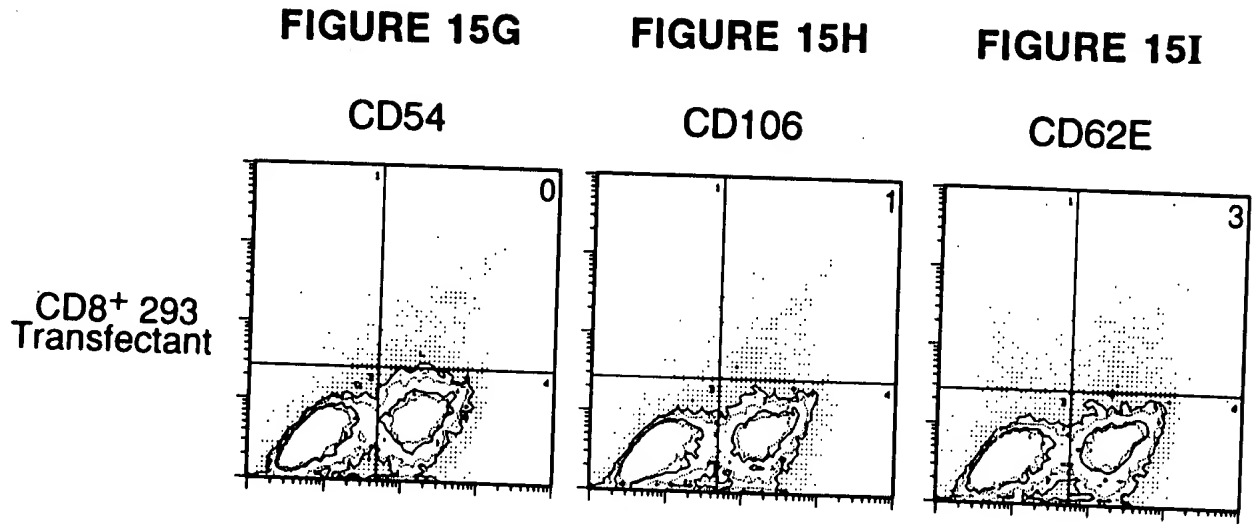
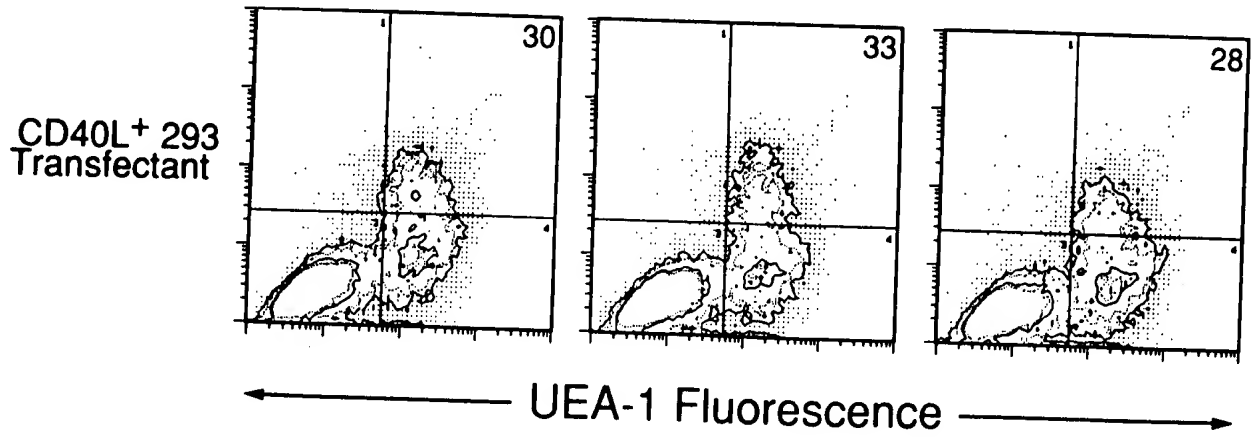


FIGURE 15J

FIGURE 15K

FIGURE 15L



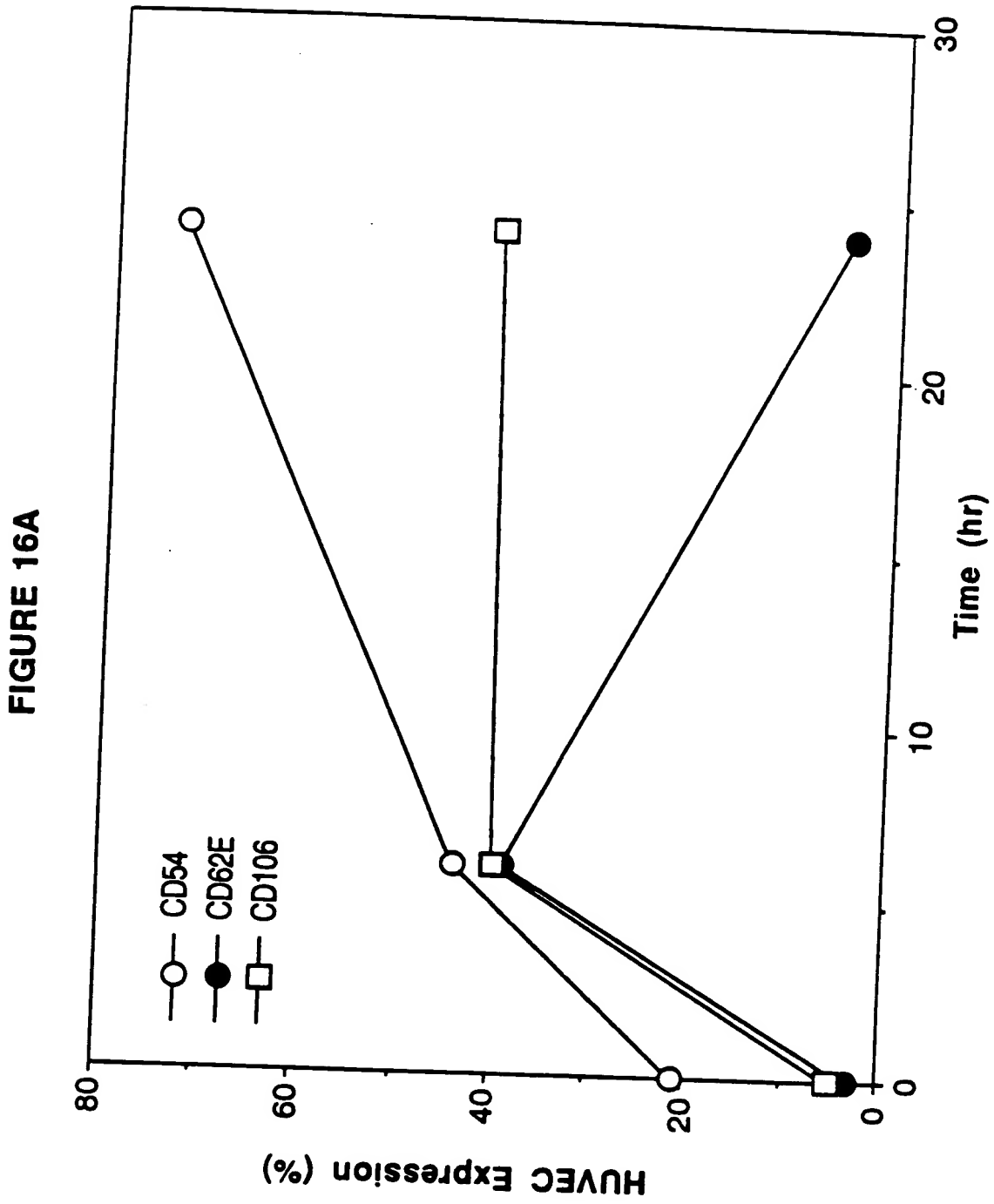

HUVEC Expression (%)
80
60
40
20
0
0
10
20
30
Time (hr)
CD54
CD62E
CD106

FIGURE 16A

FIGURE 16B

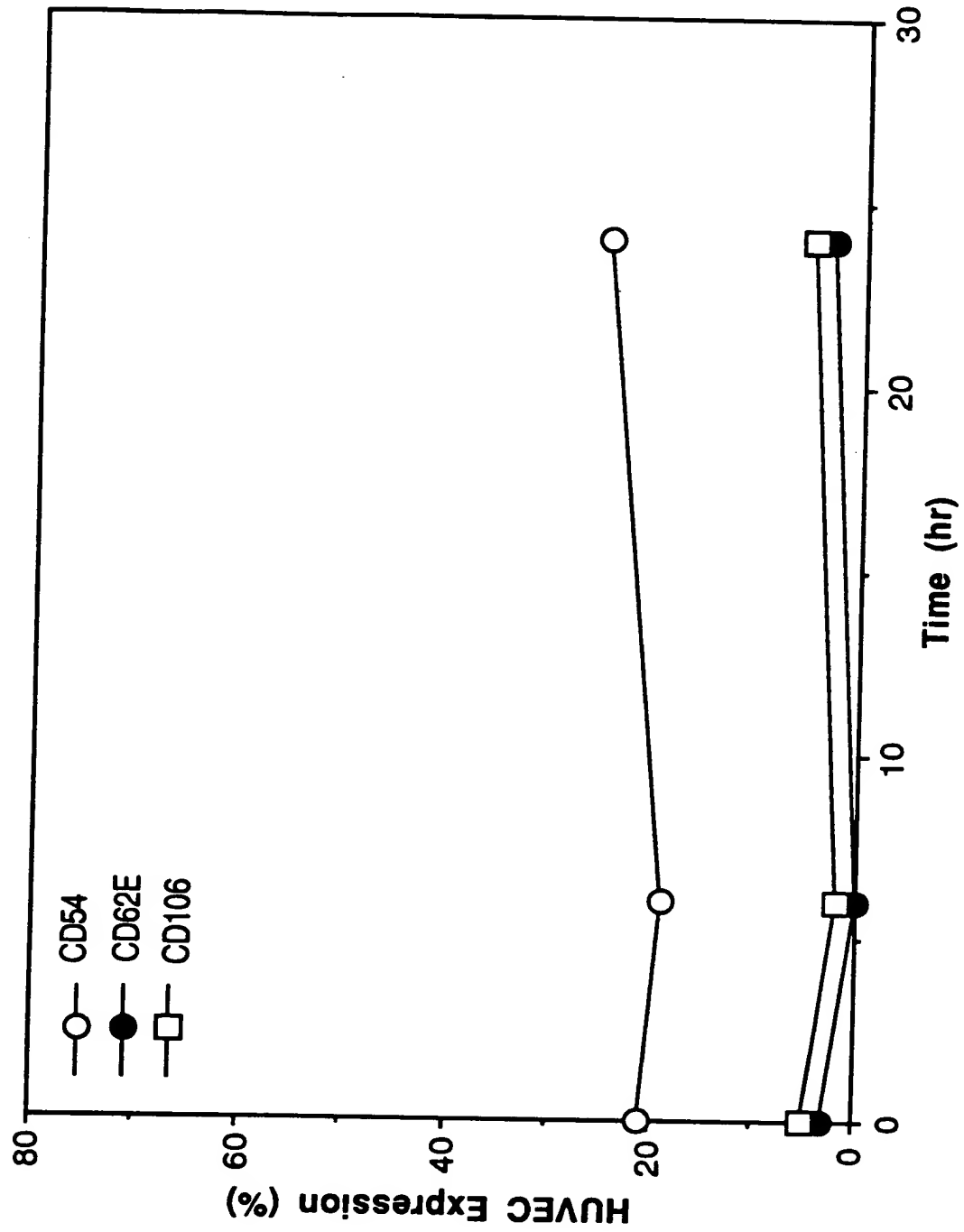

HUVEC Expression (%)
80
60
40
20
0
0
10
20
30
Time (hr)
CD54
CD62E
CD106

FIGURE 17A

```
REMARKS ATOMIC COORDINATES OF CD40L CRYSTAL STRUCTURE IN PDB FORMAT
CRYST     77.170    77.170    90.460  90.00  90.00 120.00 R3
ATOM      1   N    GLY   116      -7.954 -16.144  22.488  1.00 64.71      A
ATOM      2   HT1  GLY   116      -7.087 -15.852  21.964  1.00 15.00      A
ATOM      3   HT2  GLY   116      -8.082 -17.142  22.242  1.00 15.00      A
ATOM      4   HT3  GLY   116      -8.630 -15.576  21.928  1.00 15.00      A
ATOM      5   CA   GLY   116      -7.927 -15.755  23.928  1.00 64.37      A
ATOM      6   C    GLY   116      -6.990 -16.621  24.780  1.00 64.34      A
ATOM      7   O    GLY   116      -6.968 -17.814  24.563  1.00 64.44      A
ATOM      8   N    ASP   117      -6.238 -16.043  25.740  1.00 64.04      A
ATOM      9   H    ASP   117      -5.617 -16.709  26.170  1.00 15.00      A
ATOM     10   CA   ASP   117      -6.284 -14.616  26.130  1.00 63.57      A
ATOM     11   CB   ASP   117      -5.711 -14.402  27.539  1.00 63.36      A
ATOM     12   CG   ASP   117      -6.518 -15.163  28.574  1.00 63.71      A
ATOM     13   OD1  ASP   117      -6.090 -16.247  28.965  1.00 63.24      A
ATOM     14   OD2  ASP   117      -7.566 -14.668  28.987  1.00 63.29      A
ATOM     15   C    ASP   117      -5.651 -13.585  25.184  1.00 63.31      A
ATOM     16   O    ASP   117      -6.039 -12.427  25.145  1.00 63.35      A
ATOM     17   N    GLN   118      -4.713 -14.090  24.379  1.00 62.72      A
ATOM     18   H    GLN   118      -4.450 -15.040  24.541  1.00 15.00      A
ATOM     19   CA   GLN   118      -4.097 -13.313  23.281  1.00 61.79      A
ATOM     20   CB   GLN   118      -2.918 -14.117  22.687  1.00 62.46      A
ATOM     21   CG   GLN   118      -3.047 -15.659  22.562  1.00 62.95      A
ATOM     22   CD   GLN   118      -4.277 -16.118  21.790  1.00 63.26      A
ATOM     23   OE1  GLN   118      -5.396 -16.000  22.277  1.00 63.43      A
ATOM     24   NE2  GLN   118      -4.044 -16.665  20.601  1.00 63.42      A
ATOM     25   HE21 GLN   118      -4.836 -16.715  19.975  1.00 15.00      A
ATOM     26   HE22 GLN   118      -3.151 -16.995  20.298  1.00 15.00      A
ATOM     27   C    GLN   118      -4.999 -12.841  22.128  1.00 60.59      A
ATOM     28   O    GLN   118      -4.887 -13.379  21.052  1.00 60.79      A
ATOM     29   N    ASN   119      -5.912 -11.901  22.445  1.00 58.61      A
ATOM     30   H    ASN   119      -5.917 -11.600  23.389  1.00 15.00      A
ATOM     31   CA   ASN   119      -6.689 -11.222  21.386  1.00 56.39      A
ATOM     32   CB   ASN   119      -7.947 -11.982  20.936  1.00 56.95      A
ATOM     33   CG   ASN   119      -7.652 -13.352  20.375  1.00 57.45      A
ATOM     34   OD1  ASN   119      -7.941 -14.303  21.084  1.00 58.50      A
ATOM     35   ND2  ASN   119      -7.005 -13.431  19.241  1.00 58.58      A
ATOM     36   HD21 ASN   119      -6.843 -12.617  18.646  1.00 15.00      A
ATOM     37   HD22 ASN   119      -6.740 -14.221  18.684  1.00 15.00      A
ATOM     38   C    ASN   119      -7.053  -9.724  21.571  1.00 53.62      A
ATOM     39   O    ASN   119      -6.746  -8.933  20.694  1.00 56.55      A
ATOM     40   N    PRO   120      -7.737  -9.288  22.698  1.00 50.17      A
ATOM     41   CD   PRO   120      -8.151 -10.129  23.810  1.00 51.90      A
ATOM     42   CA   PRO   120      -8.402  -7.945  22.818  1.00 48.19      A
ATOM     43   CB   PRO   120      -9.191  -8.008  24.117  1.00 47.42      A
ATOM     44   CG   PRO   120      -9.444  -9.493  24.321  1.00 51.93      A
ATOM     45   C    PRO   120      -7.750  -6.524  22.657  1.00 45.59      A
ATOM     46   O    PRO   120      -8.187  -5.516  23.225  1.00 45.37      A
ATOM     47   N    GLN   121      -6.789  -6.458  21.721  1.00 38.52      A
ATOM     48   H    GLN   121      -6.287  -7.304  21.505  1.00 15.00      A
ATOM     49   CA   GLN   121      -6.733  -5.359  20.753  1.00 29.14      A
ATOM     50   CB   GLN   121      -5.454  -5.735  19.971  1.00 26.30      A
ATOM     51   CG   GLN   121      -5.128  -4.943  18.710  1.00 26.84      A
ATOM     52   CD   GLN   121      -4.923  -3.460  18.949  1.00 27.26      A
ATOM     53   OE1  GLN   121      -5.822  -2.668  18.709  1.00 28.66      A
ATOM     54   NE2  GLN   121      -3.717  -3.100  19.341  1.00 33.90      A
ATOM     55   HE21 GLN   121       2.883  -3.614  19.564  1.00 15.00      A
ATOM     56   HE22 GLN   121      -3.442  -2.138  19.204  1.00 15.00      A
ATOM     57   C    GLN   121      -8.065  -5.218  19.903  1.00 26.33      A
ATOM     58   O    GLN   121      -8.905  -6.097  19.834  1.00 21.41      A
ATOM     59   N    ILE   122      -8.288  -4.051  19.272  1.00 21.21      A
```

FIGURE 17B

```
ATOM     60  H   ILE   122      -7.600  -3.320  19.337  1.00 15.00      A
ATOM     61  CA  ILE   122      -9.383  -3.952  18.295  1.00 20.92      A
ATOM     62  CB  ILE   122     -10.238  -2.629  18.396  1.00 22.17      A
ATOM     63  CG2 ILE   122     -11.275  -2.428  17.272  1.00 21.61      A
ATOM     64  CG1 ILE   122     -11.076  -2.744  19.668  1.00 24.13      A
ATOM     65  CD1 ILE   122     -11.751  -1.440  20.073  1.00 23.04      A
ATOM     66  C   ILE   122      -8.833  -4.108  16.895  1.00 18.96      A
ATOM     67  O   ILE   122      -8.135  -3.243  16.379  1.00 17.93      A
ATOM     68  N   ALA   123      -9.159  -5.240  16.283  1.00 14.72      A
ATOM     69  H   ALA   123      -9.599  -5.978  16.805  1.00 15.00      A
ATOM     70  CA  ALA   123      -8.656  -5.401  14.917  1.00 14.29      A
ATOM     71  CB  ALA   123      -7.176  -5.868  14.903  1.00 12.83      A
ATOM     72  C   ALA   123      -9.483  -6.315  13.985  1.00 15.66      A
ATOM     73  O   ALA   123     -10.170  -7.261  14.323  1.00 13.58      A
ATOM     74  N   ALA   124      -9.388  -6.009  12.724  1.00 13.45      A
ATOM     75  H   ALA   124      -8.894  -5.185  12.456  1.00 15.00      A
ATOM     76  CA  ALA   124     -10.087  -6.920  11.836  1.00 14.55      A
ATOM     77  CB  ALA   124     -11.486  -6.368  11.446  1.00 11.37      A
ATOM     78  C   ALA   124      -9.271  -7.123  10.563  1.00 13.54      A
ATOM     79  O   ALA   124      -8.501  -6.274  10.129  1.00 16.29      A
ATOM     80  N   HIS   125      -9.544  -8.248   9.937  1.00 11.49      A
ATOM     81  H   HIS   125     -10.100  -8.900  10.426  1.00 15.00      A
ATOM     82  CA  HIS   125      -9.100  -8.524   8.590  1.00 11.51      A
ATOM     83  CB  HIS   125      -7.605  -8.908   8.614  1.00 11.43      A
ATOM     84  CG  HIS   125      -7.119  -9.116   7.205  1.00  7.41      A
ATOM     85  ND1 HIS   125      -6.750  -8.130   6.421  1.00  6.60      A
ATOM     86  HD1 HIS   125      -6.708  -7.168   6.621  1.00 15.00      A
ATOM     87  CD2 HIS   125      -7.075 -10.291   6.456  1.00 12.36      A
ATOM     88  NE2 HIS   125      -6.670  -9.971   5.234  1.00  6.20      A
ATOM     89  CE1 HIS   125      -6.462  -8.646   5.211  1.00  4.48      A
ATOM     90  C   HIS   125     -10.024  -9.570   7.931  1.00 12.63      A
ATOM     91  O   HIS   125     -10.324 -10.650   8.383  1.00 13.14      A
ATOM     92  N   VAL   126     -10.550  -9.129   6.806  1.00 15.65      A
ATOM     93  H   VAL   126     -10.169  -8.286   6.428  1.00 15.00      A
ATOM     94  CA  VAL   126     -11.743  -9.717   6.201  1.00 14.38      A
ATOM     95  CB  VAL   126     -12.877  -8.808   6.675  1.00 13.37      A
ATOM     96  CG1 VAL   126     -13.794  -9.722   7.379  1.00 12.60      A
ATOM     97  CG2 VAL   126     -13.449  -7.663   5.814  1.00  9.61      A
ATOM     98  C   VAL   126     -11.502  -9.971   4.685  1.00 16.03      A
ATOM     99  O   VAL   126     -10.684  -9.297   4.074  1.00 16.42      A
ATOM    100  N   ILE   127     -12.118 -11.013   4.136  1.00 15.99      A
ATOM    101  H   ILE   127     -12.807 -11.481   4.691  1.00 15.00      A
ATOM    102  CA  ILE   127     -11.651 -11.532   2.831  1.00 14.86      A
ATOM    103  CB  ILE   127     -11.414 -13.051   3.002  1.00 17.56      A
ATOM    104  CG2 ILE   127     -11.716 -13.910   1.765  1.00 17.17      A
ATOM    105  CG1 ILE   127      -9.972 -13.316   3.399  1.00 16.47      A
ATOM    106  CD1 ILE   127      -9.705 -12.992   4.864  1.00 19.64      A
ATOM    107  C   ILE   127     -12.691 -11.269   1.765  1.00 18.96      A
ATOM    108  O   ILE   127     -13.898 -11.391   2.016  1.00 20.01      A
ATOM    109  N   SER   128     -12.229 -10.882   0.581  1.00 17.54      A
ATOM    110  H   SER   128     -11.232 -10.871   0.382  1.00 15.00      A
ATOM    111  CA  SER   128     -13.274 -10.667  -0.437  1.00 15.55      A
ATOM    112  CB  SER   128     -12.664 -10.130  -1.706  1.00 18.16      A
ATOM    113  OG  SER   128     -12.205 -11.207  -2.574  1.00 19.90      A
ATOM    114  HG  SER   128     -11.832 -11.931  -2.029  1.00 15.00      A
ATOM    115  C   SER   128     -14.295 -11.761  -0.792  1.00 13.62      A
ATOM    116  O   SER   128     -14.052 -12.960  -0.832  1.00  8.98      A
ATOM    117  N   GLU   129     -15.492 -11.246  -1.027  1.00 13.36      A
ATOM    118  H   GLU   129     -15.661 -10.257  -0.937  1.00 15.00      A
ATOM    119  CA  GLU   129     -16.379 -12.024  -1.840  1.00 17.20      A
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FIGURE 17C

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ATOM    120  CB  GLU   129     -17.052 -13.117  -1.021  1.00 20.55      A
ATOM    121  CG  GLU   129     -18.092 -12.694  -0.036  1.00 17.92      A
ATOM    122  CD  GLU   129     -18.781 -13.951   0.376  1.00 21.98      A
ATOM    123  OE1 GLU   129     -19.997 -13.932   0.368  1.00 32.23      A
ATOM    124  OE2 GLU   129     -18.150 -14.938   0.734  1.00 33.12      A
ATOM    125  C   GLU   129     -17.371 -11.409  -2.809  1.00 17.71      A
ATOM    126  O   GLU   129     -17.972 -10.389  -2.553  1.00 21.59      A
ATOM    127  N   ALA   130     -17.550 -12.145  -3.914  1.00 20.52      A
ATOM    128  H   ALA   130     -17.136 -13.057  -3.923  1.00 15.00      A
ATOM    129  CA  ALA   130     -18.379 -11.649  -5.019  1.00 23.36      A
ATOM    130  CB  ALA   130     -18.424 -12.633  -6.208  1.00 19.66      A
ATOM    131  C   ALA   130     -19.811 -11.298  -4.570  1.00 26.86      A
ATOM    132  O   ALA   130     -20.519 -12.022  -3.869  1.00 29.40      A
ATOM    133  N   SER   131     -20.198 -10.086  -4.968  1.00 21.70      A
ATOM    134  H   SER   131     -19.515  -9.481  -5.410  1.00 15.00      A
ATOM    135  CA  SER   131     -21.592  -9.782  -4.732  1.00 20.04      A
ATOM    136  CB  SER   131     -21.829  -8.266  -4.787  1.00 20.65      A
ATOM    137  OG  SER   131     -23.182  -8.001  -4.435  1.00 15.24      A
ATOM    138  HG  SER   131     -23.329  -7.069  -4.559  1.00 15.00      A
ATOM    139  C   SER   131     -22.546 -10.501  -5.668  1.00 17.15      A
ATOM    140  O   SER   131     -22.236 -10.853  -6.786  1.00 14.30      A
ATOM    141  N   SER   132     -23.756 -10.731  -5.187  1.00 20.15      A
ATOM    142  H   SER   132     -23.967 -10.586  -4.209  1.00 15.00      A
ATOM    143  CA  SER   132     -24.674 -11.250  -6.218  1.00 21.62      A
ATOM    144  CB  SER   132     -25.266 -12.616  -5.893  1.00 16.00      A
ATOM    145  OG  SER   132     -26.203 -12.324  -4.894  1.00 23.84      A
ATOM    146  HG  SER   132     -26.016 -12.944  -4.179  1.00 15.00      A
ATOM    147  C   SER   132     -25.727 -10.268  -6.671  1.00 20.07      A
ATOM    148  O   SER   132     -26.535 -10.544  -7.547  1.00 20.27      A
ATOM    149  N   LYS   133     -25.606  -9.063  -6.118  1.00 21.87      A
ATOM    150  H   LYS   133     -24.904  -8.969  -5.397  1.00 15.00      A
ATOM    151  CA  LYS   133     -26.406  -7.916  -6.517  1.00 19.23      A
ATOM    152  CB  LYS   133     -27.024  -7.309  -5.256  1.00 23.08      A
ATOM    153  CG  LYS   133     -27.684  -8.364  -4.354  1.00 21.07      A
ATOM    154  CD  LYS   133     -29.174  -8.110  -4.320  1.00 27.36      A
ATOM    155  CE  LYS   133     -29.939  -7.884  -5.670  1.00 30.56      A
ATOM    156  NZ  LYS   133     -31.323  -7.515  -5.345  1.00 21.56      A
ATOM    157  HZ1 LYS   133     -31.862  -7.351  -6.218  1.00 15.00      A
ATOM    158  HZ2 LYS   133     -31.753  -8.299  -4.811  1.00 15.00      A
ATOM    159  HZ3 LYS   133     -31.333  -6.654  -4.760  1.00 15.00      A
ATOM    160  C   LYS   133     -25.579  -6.876  -7.194  1.00 20.10      A
ATOM    161  O   LYS   133     -24.378  -6.801  -7.007  1.00 17.94      A
ATOM    162  N   THR   134     -26.260  -6.052  -7.983  1.00 22.95      A
ATOM    163  H   THR   134     -27.275  -6.130  -8.036  1.00 15.00      A
ATOM    164  CA  THR   134     -25.556  -4.879  -8.561  1.00 27.89      A
ATOM    165  CB  THR   134     -26.498  -4.274  -9.592  1.00 24.59      A
ATOM    166  OG1 THR   134     -26.540  -5.037 -10.792  1.00 24.32      A
ATOM    167  HG1 THR   134     -26.232  -4.411 -11.456  1.00 15.00      A
ATOM    168  CG2 THR   134     -26.044  -2.897  -9.968  1.00 22.97      A
ATOM    169  C   THR   134     -24.987  -3.798  -7.559  1.00 32.51      A
ATOM    170  O   THR   134     -25.658  -3.461  -6.603  1.00 38.43      A
ATOM    171  N   THR   135     -23.717  -3.352  -7.690  1.00 35.98      A
ATOM    172  H   THR   135     -23.292  -3.555  -8.585  1.00 15.00      A
ATOM    173  CA  THR   135     -22.964  -3.469  -6.386  1.00 36.02      A
ATOM    174  CB  THR   135     -21.575  -4.276  -6.534  1.00 36.01      A
ATOM    175  OG1 THR   135     -21.645  -5.388  -7.488  1.00 30.60      A
ATOM    176  HG1 THR   135     -22.255  -6.094  -7.312  1.00 15.00      A
ATOM    177  CG2 THR   135     -20.866  -4.776  -5.264  1.00 35.55      A
ATOM    178  C   THR   135     -22.949  -2.266  -5.404  1.00 30.25      A
ATOM    179  O   THR   135     -23.541  -2.348  -4.331  1.00 28.35      A
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FIGURE 17D

ATOM	180	N	SER	136	-22.294	-1.146	-5.776	1.00	23.29	A
ATOM	181	H	SER	136	-22.828	-0.357	-5.460	1.00	15.00	A
ATOM	182	CA	SER	136	-20.857	-1.051	-6.143	1.00	23.04	A
ATOM	183	CB	SER	136	-20.560	0.187	-6.965	1.00	21.03	A
ATOM	184	OG	SER	136	-20.624	1.261	-6.043	1.00	28.21	A
ATOM	185	HG	SER	136	-19.815	1.793	-6.008	1.00	15.00	A
ATOM	186	C	SER	136	-19.853	-1.090	-4.958	1.00	21.77	A
ATOM	187	O	SER	136	-18.630	-1.096	-5.080	1.00	21.94	A
ATOM	188	N	VAL	137	-20.452	-1.227	-3.752	1.00	24.03	A
ATOM	189	H	VAL	137	-21.440	-1.063	-3.705	1.00	15.00	A
ATOM	190	CA	VAL	137	-19.699	-1.632	-2.570	1.00	19.65	A
ATOM	191	CB	VAL	137	-20.218	-1.010	-1.248	1.00	21.14	A
ATOM	192	CG1	VAL	137	-20.419	-1.907	-0.058	1.00	18.16	A
ATOM	193	CG2	VAL	137	-21.322	-0.026	-1.442	1.00	13.49	A
ATOM	194	C	VAL	137	-19.370	-3.116	-2.473	1.00	17.15	A
ATOM	195	O	VAL	137	-20.209	-3.969	-2.593	1.00	16.69	A
ATOM	196	N	LEU	138	-18.077	-3.344	-2.271	1.00	15.84	A
ATOM	197	H	LEU	138	-17.502	-2.528	-2.246	1.00	15.00	A
ATOM	198	CA	LEU	138	-17.507	-4.667	-1.938	1.00	18.21	A
ATOM	199	CB	LEU	138	-15.962	-4.530	-1.791	1.00	13.60	A
ATOM	200	CG	LEU	138	-15.273	-3.854	-2.998	1.00	16.09	A
ATOM	201	CD1	LEU	138	-15.923	-4.379	-4.300	1.00	20.35	A
ATOM	202	CD2	LEU	138	-13.710	-3.936	-2.982	1.00	12.34	A
ATOM	203	C	LEU	138	-18.170	-5.480	-0.772	1.00	16.29	A
ATOM	204	O	LEU	138	-18.498	-4.986	0.301	1.00	12.97	A
ATOM	205	N	GLN	139	-18.345	-6.768	-1.035	1.00	13.04	A
ATOM	206	H	GLN	139	-18.052	-7.078	-1.960	1.00	15.00	A
ATOM	207	CA	GLN	139	-18.757	-7.658	0.013	1.00	15.32	A
ATOM	208	CB	GLN	139	-19.847	-8.678	-0.481	1.00	13.99	A
ATOM	209	CG	GLN	139	-21.068	-7.960	-1.113	1.00	20.85	A
ATOM	210	CD	GLN	139	-21.872	-7.022	-0.193	1.00	22.04	A
ATOM	211	OE1	GLN	139	-22.343	-7.439	0.878	1.00	25.45	A
ATOM	212	NE2	GLN	139	-21.963	-5.739	-0.618	1.00	17.74	A
ATOM	213	HE21	GLN	139	-22.697	-5.181	-0.206	1.00	15.00	A
ATOM	214	HE22	GLN	139	-21.460	-5.326	-1.374	1.00	15.00	A
ATOM	215	C	GLN	139	-17.527	-8.383	0.541	1.00	14.26	A
ATOM	216	O	GLN	139	-16.554	-8.640	-0.144	1.00	14.40	A
ATOM	217	N	TRP	140	-17.647	-8.780	1.805	1.00	12.80	A
ATOM	218	H	TRP	140	-18.433	-8.447	2.297	1.00	15.00	A
ATOM	219	CA	TRP	140	-16.542	-9.500	2.463	1.00	14.03	A
ATOM	220	CB	TRP	140	-15.813	-8.623	3.483	1.00	14.18	A
ATOM	221	CG	TRP	140	-15.467	-7.291	2.823	1.00	8.44	A
ATOM	222	CD2	TRP	140	-14.379	-6.966	1.941	1.00	9.01	A
ATOM	223	CE2	TRP	140	-14.549	-5.625	1.482	1.00	8.40	A
ATOM	224	CE3	TRP	140	-13.215	-7.688	1.581	1.00	10.14	A
ATOM	225	CD1	TRP	140	-16.225	-6.137	2.863	1.00	11.29	A
ATOM	226	NE1	TRP	140	-15.710	-5.150	2.077	1.00	14.27	A
ATOM	227	HE1	TRP	140	-16.121	-4.268	2.010	1.00	15.00	A
ATOM	228	CZ2	TRP	140	-13.640	-5.009	0.590	1.00	8.16	A
ATOM	229	CZ3	TRP	140	-12.292	-7.069	0.713	1.00	13.90	A
ATOM	230	CH2	TRP	140	-12.497	-5.749	0.215	1.00	12.11	A
ATOM	231	C	TRP	140	-17.016	-10.701	3.170	1.00	14.34	A
ATOM	232	O	TRP	140	-18.193	-10.862	3.392	1.00	16.00	A
ATOM	233	N	ALA	141	-16.082	-11.528	3.558	1.00	14.80	A
ATOM	234	H	ALA	141	-15.133	-11.377	3.294	1.00	15.00	A
ATOM	235	CA	ALA	141	-16.489	-12.617	4.394	1.00	15.27	A
ATOM	236	CB	ALA	141	-16.504	-13.920	3.583	1.00	16.97	A
ATOM	237	C	ALA	141	-15.585	-12.761	5.607	1.00	15.90	A
ATOM	238	O	ALA	141	-14.453	-12.338	5.550	1.00	14.25	A
ATOM	239	N	GLU	142	-16.068	-13.366	6.688	1.00	19.74	A

FIGURE 17E

ATOM	240	H	GLU	142	-17.055	-13.574	6.688	1.00	15.00	A
ATOM	241	CA	GLU	142	-15.149	-13.759	7.731	1.00	25.93	A
ATOM	242	CB	GLU	142	-15.794	-13.910	9.117	1.00	21.75	A
ATOM	243	CG	GLU	142	-15.716	-12.456	9.647	1.00	24.05	A
ATOM	244	CD	GLU	142	-16.749	-12.087	10.711	1.00	26.61	A
ATOM	245	OE1	GLU	142	-17.908	-11.888	10.361	1.00	34.72	A
ATOM	246	OE2	GLU	142	-16.404	-11.984	11.886	1.00	30.07	A
ATOM	247	C	GLU	142	-14.200	-14.797	7.193	1.00	33.25	A
ATOM	248	O	GLU	142	-13.156	-14.349	6.737	1.00	41.84	A
ATOM	249	N	LYS	143	-14.577	-16.080	7.084	1.00	34.17	A
ATOM	250	H	LYS	143	-15.432	-16.384	7.492	1.00	15.00	A
ATOM	251	CA	LYS	143	-13.882	-16.854	5.980	1.00	35.31	A
ATOM	252	CB	LYS	143	-14.673	-16.603	4.681	1.00	37.64	A
ATOM	253	CG	LYS	143	-14.300	-17.505	3.531	1.00	47.37	A
ATOM	254	CD	LYS	143	-15.022	-17.284	2.202	1.00	50.37	A
ATOM	255	CE	LYS	143	-14.686	-16.047	1.357	1.00	49.23	A
ATOM	256	NZ	LYS	143	-15.632	-16.097	0.221	1.00	51.67	A
ATOM	257	HZ1	LYS	143	-15.333	-15.445	-0.534	1.00	15.00	A
ATOM	258	HZ2	LYS	143	-15.680	-17.061	-0.177	1.00	15.00	A
ATOM	259	HZ3	LYS	143	-16.564	-15.833	0.585	1.00	15.00	A
ATOM	260	C	LYS	143	-12.330	-16.979	5.637	1.00	32.80	A
ATOM	261	O	LYS	143	-11.831	-18.041	5.276	1.00	35.64	A
ATOM	262	N	GLY	144	-11.522	-15.923	5.637	1.00	28.26	A
ATOM	263	H	GLY	144	-11.718	-14.995	5.910	1.00	15.00	A
ATOM	264	CA	GLY	144	-10.243	-16.458	5.194	1.00	32.94	A
ATOM	265	C	GLY	144	-9.178	-16.862	6.180	1.00	29.93	A
ATOM	266	O	GLY	144	-9.345	-17.454	7.205	1.00	24.67	A
ATOM	267	N	TYR	145	-8.069	-16.270	5.815	1.00	26.37	A
ATOM	268	H	TYR	145	-8.160	-15.729	4.966	1.00	15.00	A
ATOM	269	CA	TYR	145	-7.027	-16.002	6.777	1.00	27.61	A
ATOM	270	CB	TYR	145	-5.708	-15.877	5.947	1.00	37.54	A
ATOM	271	CG	TYR	145	-5.962	-15.774	4.456	1.00	50.95	A
ATOM	272	CD1	TYR	145	-5.682	-14.633	3.706	1.00	53.22	A
ATOM	273	CE1	TYR	145	-6.313	-14.377	2.468	1.00	60.28	A
ATOM	274	CD2	TYR	145	-6.591	-16.847	3.791	1.00	53.11	A
ATOM	275	CE2	TYR	145	-7.207	-16.699	2.551	1.00	56.30	A
ATOM	276	CZ	TYR	145	-7.162	-15.430	1.873	1.00	61.12	A
ATOM	277	OH	TYR	145	-7.812	-15.119	0.665	1.00	62.63	A
ATOM	278	HH	TYR	145	-8.575	-15.686	0.401	1.00	15.00	A
ATOM	279	C	TYR	145	-7.532	-14.762	7.620	1.00	22.41	A
ATOM	280	O	TYR	145	-7.000	-13.677	7.650	1.00	22.68	A
ATOM	281	N	TYR	146	-8.731	-14.884	8.196	1.00	20.39	A
ATOM	282	H	TYR	146	-8.935	-15.824	8.509	1.00	15.00	A
ATOM	283	CA	TYR	146	-9.423	-13.700	8.725	1.00	20.40	A
ATOM	284	CB	TYR	146	-10.886	-13.673	8.306	1.00	22.53	A
ATOM	285	CG	TYR	146	-11.710	-14.460	9.286	1.00	23.02	A
ATOM	286	CD1	TYR	146	-11.635	-15.873	9.236	1.00	26.99	A
ATOM	287	CE1	TYR	146	-12.254	-16.623	10.239	1.00	25.44	A
ATOM	288	CD2	TYR	146	-12.477	-13.766	10.236	1.00	23.45	A
ATOM	289	CE2	TYR	146	-13.150	-14.520	11.205	1.00	26.81	A
ATOM	290	CZ	TYR	146	-13.007	-15.937	11.204	1.00	27.40	A
ATOM	291	OH	TYR	146	-13.647	-16.689	12.170	1.00	31.91	A
ATOM	292	HH	TYR	146	-12.911	-17.080	12.676	1.00	15.00	A
ATOM	293	C	TYR	146	-9.291	-13.419	10.219	1.00	18.79	A
ATOM	294	O	TYR	146	-8.904	-14.232	11.012	1.00	16.13	A
ATOM	295	N	THR	147	-9.596	-12.169	10.556	1.00	17.54	A
ATOM	296	H	THR	147	-9.973	-11.607	9.830	1.00	15.00	A
ATOM	297	CA	THR	147	-9.432	-11.764	11.948	1.00	14.06	A
ATOM	298	CB	THR	147	-8.162	-10.875	12.182	1.00	13.66	A
ATOM	299	OG1	THR	147	-6.912	-11.505	11.856	1.00	12.56	A

FIGURE 17F

ATOM	300	HG1	THR	147	-6.934	-11.898	10.980	1.00	15.00	A
ATOM	301	CG2	THR	147	-8.025	-10.236	13.554	1.00	7.22	A
ATOM	302	C	THR	147	-10.619	-10.925	12.253	1.00	15.60	A
ATOM	303	O	THR	147	-11.044	-10.074	11.496	1.00	16.39	A
ATOM	304	N	MET	148	-11.144	-11.139	13.412	1.00	20.67	A
ATOM	305	H	MET	148	-10.838	-11.988	13.828	1.00	15.00	A
ATOM	306	CA	MET	148	-12.124	-10.311	14.110	1.00	19.71	A
ATOM	307	CB	MET	148	-13.546	-10.702	13.705	1.00	17.89	A
ATOM	308	CG	MET	148	-14.541	-9.580	14.019	1.00	13.53	A
ATOM	309	SD	MET	148	-14.492	-8.149	12.952	1.00	14.69	A
ATOM	310	CE	MET	148	-14.566	-8.928	11.333	1.00	10.10	A
ATOM	311	C	MET	148	-11.915	-10.282	15.639	1.00	21.49	A
ATOM	312	O	MET	148	-12.594	-10.905	16.436	1.00	22.98	A
ATOM	313	N	SER	149	-10.955	-9.412	16.055	1.00	20.58	A
ATOM	314	H	SER	149	-10.516	-8.786	15.406	1.00	15.00	A
ATOM	315	CA	SER	149	-10.388	-9.698	17.419	1.00	19.11	A
ATOM	316	CB	SER	149	-9.174	-8.860	17.792	1.00	12.17	A
ATOM	317	OG	SER	149	-9.540	-7.513	17.975	1.00	14.10	A
ATOM	318	HG	SER	149	-9.571	-7.487	18.934	1.00	15.00	A
ATOM	319	C	SER	149	-11.203	-9.844	18.727	1.00	22.19	A
ATOM	320	O	SER	149	-10.728	-10.267	19.772	1.00	22.95	A
ATOM	321	N	ASN	150	-12.456	-9.322	18.631	1.00	22.71	A
ATOM	322	H	ASN	150	-12.782	-9.247	17.688	1.00	15.00	A
ATOM	323	CA	ASN	150	-13.361	-9.236	19.764	1.00	20.32	A
ATOM	324	CB	ASN	150	-12.734	-8.446	20.955	1.00	21.56	A
ATOM	325	CG	ASN	150	-12.343	-6.962	20.706	1.00	20.71	A
ATOM	326	OD1	ASN	150	-13.059	-6.187	20.119	1.00	17.81	A
ATOM	327	ND2	ASN	150	-11.222	-6.485	21.271	1.00	23.86	A
ATOM	328	HD21	ASN	150	-11.035	-5.521	21.092	1.00	15.00	A
ATOM	329	HD22	ASN	150	-10.670	-7.109	21.821	1.00	15.00	A
ATOM	330	C	ASN	150	-14.644	-8.657	19.256	1.00	20.60	A
ATOM	331	O	ASN	150	-14.718	-8.130	18.148	1.00	20.56	A
ATOM	332	N	ASN	151	-15.637	-8.713	20.149	1.00	23.49	A
ATOM	333	H	ASN	151	-15.455	-9.124	21.038	1.00	15.00	A
ATOM	334	CA	ASN	151	-16.974	-8.080	19.823	1.00	24.71	A
ATOM	335	CB	ASN	151	-18.130	-8.645	20.712	1.00	28.30	A
ATOM	336	CG	ASN	151	-17.959	-8.271	22.173	1.00	33.23	A
ATOM	337	OD1	ASN	151	-17.075	-7.562	22.606	1.00	39.79	A
ATOM	338	ND2	ASN	151	-18.782	-8.838	23.011	1.00	38.32	A
ATOM	339	HD21	ASN	151	-18.553	-8.524	23.928	1.00	15.00	A
ATOM	340	HD22	ASN	151	-19.495	-9.465	22.733	1.00	15.00	A
ATOM	341	C	ASN	151	-17.172	-6.531	19.645	1.00	22.53	A
ATOM	342	O	ASN	151	-18.254	-6.048	19.374	1.00	21.32	A
ATOM	343	N	LEU	152	-16.066	-5.762	19.859	1.00	23.00	A
ATOM	344	H	LEU	152	-15.247	-6.289	20.070	1.00	15.00	A
ATOM	345	CA	LEU	152	-15.924	-4.335	19.525	1.00	18.87	A
ATOM	346	CB	LEU	152	-14.830	-3.700	20.325	1.00	21.77	A
ATOM	347	CG	LEU	152	-14.981	-3.999	21.806	1.00	24.80	A
ATOM	348	CD1	LEU	152	-16.390	-3.645	22.316	1.00	22.82	A
ATOM	349	CD2	LEU	152	-13.847	-3.256	22.556	1.00	23.56	A
ATOM	350	C	LEU	152	-15.565	-3.993	18.094	1.00	17.34	A
ATOM	351	O	LEU	152	-15.590	-2.840	17.708	1.00	13.39	A
ATOM	352	N	VAL	153	-15.267	-5.054	17.309	1.00	18.65	A
ATOM	353	H	VAL	153	-15.156	-5.962	17.716	1.00	15.00	A
ATOM	354	CA	VAL	153	-15.439	-4.910	15.849	1.00	16.81	A
ATOM	355	CB	VAL	153	-14.138	-5.021	14.980	1.00	15.33	A
ATOM	356	CG1	VAL	153	-12.908	-5.718	15.562	1.00	21.22	A
ATOM	357	CG2	VAL	153	-13.775	-3.757	14.287	1.00	16.95	A
ATOM	358	C	VAL	153	-16.405	-5.964	15.301	1.00	13.48	A
ATOM	359	O	VAL	153	-16.363	-7.116	13.647	1.00	13.06	A

FIGURE 17G

ATOM	360	N	THR	154	-17.207	-5.546	14.358	1.00	12.06	A
ATOM	361	H	THR	154	-17.313	-4.568	14.215	1.00	15.00	A
ATOM	362	CA	THR	154	-17.903	-6.600	13.615	1.00	16.26	A
ATOM	363	CB	THR	154	-19.366	-6.747	14.157	1.00	19.51	A
ATOM	364	OG1	THR	154	-19.995	-5.459	14.205	1.00	19.31	A
ATOM	365	HG1	THR	154	-20.577	-5.508	14.949	1.00	15.00	A
ATOM	366	CG2	THR	154	-19.502	-7.288	15.571	1.00	21.62	A
ATOM	367	C	THR	154	-17.997	-6.252	12.107	1.00	18.12	A
ATOM	368	O	THR	154	-17.952	-5.110	11.605	1.00	16.55	A
ATOM	369	N	LEU	155	-18.101	-7.324	11.357	1.00	16.77	A
ATOM	370	H	LEU	155	-18.056	-8.202	11.791	1.00	15.00	A
ATOM	371	CA	LEU	155	-18.514	-7.198	9.967	1.00	17.10	A
ATOM	372	CB	LEU	155	-17.829	-8.353	9.204	1.00	20.04	A
ATOM	373	CG	LEU	155	-17.524	-8.428	7.692	1.00	20.81	A
ATOM	374	CD1	LEU	155	-17.822	-7.159	6.908	1.00	17.03	A
ATOM	375	CD2	LEU	155	-17.912	-9.810	7.139	1.00	12.42	A
ATOM	376	C	LEU	155	-20.055	-7.187	9.904	1.00	20.71	A
ATOM	377	O	LEU	155	-20.712	-8.163	10.217	1.00	18.01	A
ATOM	378	N	GLU	156	-20.593	-5.995	9.561	1.00	19.51	A
ATOM	379	H	GLU	156	-19.959	-5.230	9.440	1.00	15.00	A
ATOM	380	CA	GLU	156	-22.036	-5.888	9.413	1.00	21.95	A
ATOM	381	CB	GLU	156	-22.641	-4.631	10.033	1.00	18.95	A
ATOM	382	CG	GLU	156	-22.098	-4.412	11.436	1.00	27.68	A
ATOM	383	CD	GLU	156	-22.721	-5.194	12.587	1.00	31.62	A
ATOM	384	OE1	GLU	156	-23.347	-6.248	12.367	1.00	33.40	A
ATOM	385	OE2	GLU	156	-22.532	-4.721	13.724	1.00	35.00	A
ATOM	386	C	GLU	156	-22.457	-5.966	7.964	1.00	25.36	A
ATOM	387	O	GLU	156	-21.958	-5.298	7.077	1.00	22.70	A
ATOM	388	N	ASN	157	-23.437	-6.808	7.696	1.00	30.92	A
ATOM	389	H	ASN	157	-23.594	-7.590	8.300	1.00	15.00	A
ATOM	390	CA	ASN	157	-23.804	-6.620	6.300	1.00	33.31	A
ATOM	391	CB	ASN	157	-23.856	-7.970	5.614	1.00	31.69	A
ATOM	392	CG	ASN	157	-23.669	-7.693	4.168	1.00	27.70	A
ATOM	393	OD1	ASN	157	-23.397	-6.593	3.810	1.00	25.89	A
ATOM	394	ND2	ASN	157	-23.893	-8.640	3.275	1.00	41.69	A
ATOM	395	HD21	ASN	157	-24.069	-9.603	3.467	1.00	15.00	A
ATOM	396	HD22	ASN	157	-23.745	-8.295	2.340	1.00	15.00	A
ATOM	397	C	ASN	157	-24.988	-5.658	6.118	1.00	35.08	A
ATOM	398	O	ASN	157	-26.107	-5.949	6.499	1.00	37.06	A
ATOM	399	N	GLY	158	-24.746	-4.443	5.560	1.00	40.03	A
ATOM	400	H	GLY	158	-25.601	-3.952	5.429	1.00	15.00	A
ATOM	401	CA	GLY	158	-23.422	-3.887	5.121	1.00	38.11	A
ATOM	402	C	GLY	158	-23.062	-3.720	3.617	1.00	37.48	A
ATOM	403	O	GLY	158	-23.890	-3.108	2.950	1.00	41.11	A
ATOM	404	N	LYS	159	-21.867	-4.220	3.135	1.00	32.75	A
ATOM	405	H	LYS	159	-21.904	-4.134	2.130	1.00	15.00	A
ATOM	406	CA	LYS	159	-20.828	-4.928	3.962	1.00	27.83	A
ATOM	407	CB	LYS	159	-20.317	-6.122	3.217	1.00	28.17	A
ATOM	408	CG	LYS	159	-19.734	-7.168	4.069	1.00	20.48	A
ATOM	409	CD	LYS	159	-20.533	-8.426	4.192	1.00	29.61	A
ATOM	410	CE	LYS	159	-20.577	-9.191	2.869	1.00	40.41	A
ATOM	411	NZ	LYS	159	-20.796	-10.663	2.986	1.00	40.88	A
ATOM	412	HZ1	LYS	159	-20.739	-11.087	2.035	1.00	15.00	A
ATOM	413	HZ2	LYS	159	-20.070	-11.087	3.600	1.00	15.00	A
ATOM	414	HZ3	LYS	159	-21.738	-10.848	3.389	1.00	15.00	A
ATOM	415	C	LYS	159	-19.688	-4.065	4.463	1.00	26.08	A
ATOM	416	O	LYS	159	-19.023	-3.369	3.696	1.00	28.01	A
ATOM	417	N	GLN	160	-19.683	-3.990	5.807	1.00	18.90	A
ATOM	418	H	GLN	160	-20.211	-4.674	6.319	1.00	15.00	A
ATOM	419	CA	GLN	160	-18.922	-2.929	6.464	1.00	13.89	A

FIGURE 17H

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ATOM    420   CB  GLN   160     -19.778   -1.694    6.611   1.00 16.79      A
ATOM    421   CG  GLN   160     -20.881   -1.896    7.633   1.00 18.34      A
ATOM    422   CD  GLN   160     -22.133   -1.166    7.193   1.00 23.97      A
ATOM    423  OE1  GLN   160     -23.088   -0.970    7.893   1.00 31.18      A
ATOM    424  NE2  GLN   160     -22.257   -0.771    5.948   1.00 28.16      A
ATOM    425 HE21  GLN   160     -23.194   -0.420    5.928   1.00 15.00      A
ATOM    426 HE22  GLN   160     -21.624   -0.780    5.186   1.00 15.00      A
ATOM    427    C  GLN   160     -18.313   -3.309    7.777   1.00 12.87      A
ATOM    428    O  GLN   160     -18.838   -4.151    8.498   1.00 14.78      A
ATOM    429    N  LEU   161     -17.187   -2.637    8.085   1.00 11.22      A
ATOM    430    H  LEU   161     -16.767   -2.124    7.340   1.00 15.00      A
ATOM    431   CA  LEU   161     -16.583   -2.870    9.405   1.00  9.71      A
ATOM    432   CB  LEU   161     -15.052   -2.939    9.390   1.00  4.67      A
ATOM    433   CG  LEU   161     -14.438   -4.060    8.559   1.00  7.30      A
ATOM    434  CD1  LEU   161     -14.511   -5.447    9.207   1.00 10.80      A
ATOM    435  CD2  LEU   161     -12.964   -3.794    8.389   1.00  5.48      A
ATOM    436    C  LEU   161     -17.082   -1.836   10.412   1.00 10.17      A
ATOM    437    O  LEU   161     -16.826   -0.657   10.341   1.00 13.36      A
ATOM    438    N  THR   162     -17.848   -2.338   11.375   1.00 16.94      A
ATOM    439    H  THR   162     -18.153   -3.279   11.251   1.00 15.00      A
ATOM    440   CA  THR   162     -18.317   -1.480   12.493   1.00 16.14      A
ATOM    441   CB  THR   162     -19.807   -1.769   12.640   1.00 13.33      A
ATOM    442  OG1  THR   162     -20.339   -1.707   11.308   1.00 16.73      A
ATOM    443  HG1  THR   162     -21.211   -1.254   11.343   1.00 15.00      A
ATOM    444  CG2  THR   162     -20.553   -0.832   13.562   1.00 15.01      A
ATOM    445    C  THR   162     -17.531   -1.547   13.842   1.00 13.28      A
ATOM    446    O  THR   162     -17.358   -2.587   14.449   1.00 20.21      A
ATOM    447    N  VAL   163     -16.994   -0.437   14.282   1.00 14.22      A
ATOM    448    H  VAL   163     -16.859    0.243   13.567   1.00 15.00      A
ATOM    449   CA  VAL   163     -16.326   -0.358   15.586   1.00 15.72      A
ATOM    450   CB  VAL   163     -15.038    0.426   15.428   1.00 11.82      A
ATOM    451  CG1  VAL   163     -15.191    1.944   15.368   1.00  9.87      A
ATOM    452  CG2  VAL   163     -14.229   -0.124   14.245   1.00 18.88      A
ATOM    453    C  VAL   163     -17.193    0.283   16.706   1.00 17.93      A
ATOM    454    O  VAL   163     -18.001    1.180   16.453   1.00 20.25      A
ATOM    455    N  LYS   164     -17.037   -0.232   17.925   1.00 15.44      A
ATOM    456    H  LYS   164     -16.254   -0.858   18.020   1.00 15.00      A
ATOM    457   CA  LYS   164     -17.856    0.138   19.109   1.00 17.33      A
ATOM    458   CB  LYS   164     -18.351   -1.150   19.807   1.00 19.58      A
ATOM    459   CG  LYS   164     -19.214   -1.885   18.759   1.00 23.56      A
ATOM    460   CD  LYS   164     -19.417   -3.410   18.851   1.00 28.85      A
ATOM    461   CE  LYS   164     -20.039   -4.047   17.554   1.00 33.81      A
ATOM    462   NZ  LYS   164     -19.428   -3.681   16.227   1.00 18.98      A
ATOM    463  HZ1  LYS   164     -19.195   -2.667   16.222   1.00 15.00      A
ATOM    464  HZ2  LYS   164     -18.552   -4.223   16.092   1.00 15.00      A
ATOM    465  HZ3  LYS   164     -20.084   -3.888   15.445   1.00 15.00      A
ATOM    466    C  LYS   164     -17.193    1.099   20.056   1.00 15.14      A
ATOM    467    O  LYS   164     -17.712    1.588   21.048   1.00 17.72      A
ATOM    468    N  ARG   165     -15.992    1.428   19.621   1.00 17.49      A
ATOM    469    H  ARG   165     -15.550    0.838   18.932   1.00 15.00      A
ATOM    470   CA  ARG   165     -15.184    2.415   20.325   1.00 20.18      A
ATOM    471   CB  ARG   165     -13.985    1.806   21.049   1.00 24.65      A
ATOM    472   CG  ARG   165     -14.363    0.833   22.126   1.00 29.54      A
ATOM    473   CD  ARG   165     -13.274    1.077   23.145   1.00 38.82      A
ATOM    474   NE  ARG   165     -13.719    1.998   24.186   1.00 43.41      A
ATOM    475   HE  ARG   165     -14.331    1.671   24.908   1.00 15.00      A
ATOM    476   CZ  ARG   165     -13.190    3.250   24.362   1.00 44.06      A
ATOM    477  NH1  ARG   165     -13.406    3.765   25.562   1.00 41.25      A
ATOM    478 HH11  ARG   165     -13.054    4.683   25.763   1.00 15.00      A
ATOM    479 HH12  ARG   165     -13.919    3.249   26.250   1.00 15.00      A
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FIGURE 17I

ATOM	480	NH2	ARG	165	-12.485	3.946	23.425	1.00	31.65	A
ATOM	481	HH21	ARG	165	-12.133	4.860	23.623	1.00	15.00	A
ATOM	482	HH22	ARG	165	-12.322	3.527	22.530	1.00	15.00	A
ATOM	483	C	ARG	165	-14.608	3.554	19.510	1.00	17.70	A
ATOM	484	O	ARG	165	-14.018	3.450	18.441	1.00	18.26	A
ATOM	485	N	GLN	166	-14.763	4.687	20.151	1.00	17.43	A
ATOM	486	H	GLN	166	-15.263	4.614	21.007	1.00	15.00	A
ATOM	487	CA	GLN	166	-14.138	5.911	19.698	1.00	19.00	A
ATOM	488	CB	GLN	166	-14.613	7.021	20.610	1.00	23.79	A
ATOM	489	CG	GLN	166	-14.067	8.409	20.386	1.00	34.06	A
ATOM	490	CD	GLN	166	-15.178	9.399	20.659	1.00	45.91	A
ATOM	491	OE1	GLN	166	-15.102	10.492	20.135	1.00	53.64	A
ATOM	492	NE2	GLN	166	-16.202	9.046	21.418	1.00	44.10	A
ATOM	493	HE21	GLN	166	-16.906	9.765	21.443	1.00	15.00	A
ATOM	494	HE22	GLN	166	-16.577	8.287	21.935	1.00	15.00	A
ATOM	495	C	GLN	166	-12.649	5.881	19.644	1.00	17.48	A
ATOM	496	O	GLN	166	-12.029	5.378	20.561	1.00	18.13	A
ATOM	497	N	GLY	167	-12.160	6.478	18.565	1.00	14.83	A
ATOM	498	H	GLY	167	-12.750	6.836	17.850	1.00	15.00	A
ATOM	499	CA	GLY	167	-10.728	6.711	18.557	1.00	16.28	A
ATOM	500	C	GLY	167	-10.044	6.685	17.204	1.00	16.48	A
ATOM	501	O	GLY	167	-10.674	6.601	16.162	1.00	19.19	A
ATOM	502	N	LEU	168	-8.720	6.735	17.209	1.00	17.06	A
ATOM	503	H	LEU	168	-8.311	6.890	18.120	1.00	15.00	A
ATOM	504	CA	LEU	168	-7.925	6.625	15.992	1.00	16.60	A
ATOM	505	CB	LEU	168	-6.600	7.343	16.289	1.00	21.87	A
ATOM	506	CG	LEU	168	-6.247	8.745	15.716	1.00	22.69	A
ATOM	507	CD1	LEU	168	-5.119	9.410	16.539	1.00	21.20	A
ATOM	508	CD2	LEU	168	-7.436	9.617	15.361	1.00	18.38	A
ATOM	509	C	LEU	168	-7.686	5.136	15.604	1.00	14.84	A
ATOM	510	O	LEU	168	-7.282	4.278	16.392	1.00	15.89	A
ATOM	511	N	TYR	169	-7.943	4.873	14.300	1.00	10.57	A
ATOM	512	H	TYR	169	-8.313	5.659	13.807	1.00	15.00	A
ATOM	513	CA	TYR	169	-7.683	3.572	13.656	1.00	5.27	A
ATOM	514	CB	TYR	169	-8.989	3.014	13.230	1.00	5.83	A
ATOM	515	CG	TYR	169	-9.857	2.620	14.423	1.00	6.94	A
ATOM	516	CD1	TYR	169	-10.524	3.598	15.168	1.00	7.40	A
ATOM	517	CE1	TYR	169	-11.390	3.193	16.218	1.00	7.77	A
ATOM	518	CD2	TYR	169	-10.016	1.255	14.744	1.00	8.89	A
ATOM	519	CE2	TYR	169	-10.850	0.841	15.804	1.00	9.40	A
ATOM	520	CZ	TYR	169	-11.563	1.827	16.534	1.00	10.39	A
ATOM	521	OH	TYR	169	-12.443	1.410	17.534	1.00	7.99	A
ATOM	522	HH	TYR	169	-13.009	2.117	17.800	1.00	15.00	A
ATOM	523	C	TYR	169	-6.810	3.642	12.390	1.00	6.72	A
ATOM	524	O	TYR	169	-6.917	4.498	11.557	1.00	9.12	A
ATOM	525	N	TYR	170	-5.899	2.722	12.228	1.00	9.53	A
ATOM	526	H	TYR	170	-5.806	2.081	12.986	1.00	15.00	A
ATOM	527	CA	TYR	170	-5.313	2.511	10.899	1.00	10.01	A
ATOM	528	CB	TYR	170	-3.967	1.797	11.044	1.00	7.46	A
ATOM	529	CG	TYR	170	-3.259	1.636	9.679	1.00	13.45	A
ATOM	530	CD1	TYR	170	-2.680	2.766	9.052	1.00	12.66	A
ATOM	531	CE1	TYR	170	-2.213	2.658	7.738	1.00	10.18	A
ATOM	532	CD2	TYR	170	-3.304	0.385	9.057	1.00	10.90	A
ATOM	533	CE2	TYR	170	-2.891	0.303	7.730	1.00	8.68	A
ATOM	534	CZ	TYR	170	-2.331	1.419	7.124	1.00	9.97	A
ATOM	535	OH	TYR	170	-1.774	1.286	5.859	1.00	17.50	A
ATOM	536	HH	TYR	170	-1.886	0.404	5.514	1.00	15.00	A
ATOM	537	C	TYR	170	-6.279	1.610	10.073	1.00	10.40	A
ATOM	538	O	TYR	170	-6.679	0.500	10.421	1.00	12.52	A
ATOM	539	N	ILE	171	-6.704	2.174	8.968	1.00	12.16	A

FIGURE 17J

```
ATOM    540  H   ILE   171      -6.475   3.135   8.808  1.00 15.00      A
ATOM    541  CA  ILE   171      -7.608   1.430   8.138  1.00  9.37      A
ATOM    542  CB  ILE   171      -9.070   1.990   8.317  1.00 11.21      A
ATOM    543  CG2 ILE   171      -9.326   3.501   8.677  1.00 17.27      A
ATOM    544  CG1 ILE   171     -10.046   1.564   7.214  1.00 13.33      A
ATOM    545  CD1 ILE   171     -10.647   0.250   7.619  1.00 17.53      A
ATOM    546  C   ILE   171      -7.074   1.234   6.694  1.00  8.34      A
ATOM    547  O   ILE   171      -6.453   2.088   6.082  1.00  6.96      A
ATOM    548  N   TYR   172      -7.286   0.005   6.216  1.00 11.07      A
ATOM    549  H   TYR   172      -7.809  -0.624   6.786  1.00 15.00      A
ATOM    550  CA  TYR   172      -6.708  -0.378   4.922  1.00 15.60      A
ATOM    551  CB  TYR   172      -5.332  -1.082   5.037  1.00 14.32      A
ATOM    552  CG  TYR   172      -5.389  -2.397   5.796  1.00  9.21      A
ATOM    553  CD1 TYR   172      -5.342  -2.402   7.216  1.00 12.52      A
ATOM    554  CE1 TYR   172      -5.607  -3.620   7.901  1.00 10.88      A
ATOM    555  CD2 TYR   172      -5.565  -3.586   5.050  1.00 12.66      A
ATOM    556  CE2 TYR   172      -5.829  -4.800   5.740  1.00 15.83      A
ATOM    557  CZ  TYR   172      -5.822  -4.808   7.164  1.00 11.94      A
ATOM    558  OH  TYR   172      -5.995  -6.002   7.820  1.00 12.17      A
ATOM    559  HH  TYR   172      -6.433  -5.843   8.657  1.00 15.00      A
ATOM    560  C   TYR   172      -7.605  -1.276   4.106  1.00 16.85      A
ATOM    561  O   TYR   172      -8.346  -2.057   4.692  1.00 14.06      A
ATOM    562  N   ALA   173      -7.448  -1.141   2.776  1.00 16.29      A
ATOM    563  H   ALA   173      -6.751  -0.490   2.503  1.00 15.00      A
ATOM    564  CA  ALA   173      -7.940  -2.152   1.836  1.00 15.11      A
ATOM    565  CB  ALA   173      -9.300  -1.725   1.292  1.00 12.08      A
ATOM    566  C   ALA   173      -7.007  -2.537   0.653  1.00 15.86      A
ATOM    567  O   ALA   173      -6.147  -1.806   0.191  1.00 14.20      A
ATOM    568  N   GLN   174      -7.244  -3.714   0.109  1.00 16.56      A
ATOM    569  H   GLN   174      -7.774  -4.389   0.620  1.00 15.00      A
ATOM    570  CA  GLN   174      -6.470  -4.119  -1.070  1.00 19.25      A
ATOM    571  CB  GLN   174      -5.582  -5.292  -0.832  1.00 21.99      A
ATOM    572  CG  GLN   174      -4.205  -4.727  -1.030  1.00 30.99      A
ATOM    573  CD  GLN   174      -3.174  -5.845  -0.979  1.00 34.25      A
ATOM    574  OE1 GLN   174      -2.308  -5.899  -0.105  1.00 32.91      A
ATOM    575  NE2 GLN   174      -3.268  -6.699  -2.014  1.00 31.50      A
ATOM    576 HE21 GLN   174      -2.668  -7.487  -1.970  1.00 15.00      A
ATOM    577 HE22 GLN   174      -3.973  -6.621  -2.714  1.00 15.00      A
ATOM    578  C   GLN   174      -7.413  -4.644  -2.114  1.00 19.20      A
ATOM    579  O   GLN   174      -8.285  -5.434  -1.880  1.00 20.03      A
ATOM    580  N   VAL   175      -7.291  -4.107  -3.301  1.00 19.28      A
ATOM    581  H   VAL   175      -6.594  -3.401  -3.400  1.00 15.00      A
ATOM    582  CA  VAL   175      -8.247  -4.500  -4.323  1.00 22.43      A
ATOM    583  CB  VAL   175      -9.319  -3.409  -4.644  1.00 21.41      A
ATOM    584  CG1 VAL   175     -10.146  -2.830  -3.495  1.00 20.17      A
ATOM    585  CG2 VAL   175     -10.268  -4.061  -5.639  1.00 22.88      A
ATOM    586  C   VAL   175      -7.508  -4.859  -5.615  1.00 24.56      A
ATOM    587  O   VAL   175      -6.928  -3.997  -6.301  1.00 23.28      A
ATOM    588  N   THR   176      -7.563  -6.180  -5.879  1.00 25.40      A
ATOM    589  H   THR   176      -7.994  -6.850  -5.250  1.00 15.00      A
ATOM    590  CA  THR   176      -7.086  -6.501  -7.222  1.00 24.46      A
ATOM    591  CB  THR   176      -5.844  -7.454  -7.256  1.00 24.78      A
ATOM    592  OG1 THR   176      -5.948  -8.650  -8.028  1.00 20.31      A
ATOM    593  HG1 THR   176      -5.250  -9.253  -7.796  1.00 15.00      A
ATOM    594  CG2 THR   176      -5.329  -7.711  -5.867  1.00 17.07      A
ATOM    595  C   THR   176      -8.178  -6.700  -8.272  1.00 25.44      A
ATOM    596  O   THR   176      -9.326  -7.043  -7.995  1.00 26.86      A
ATOM    597  N   PHE   177      -7.855  -6.341  -9.506  1.00 22.44      A
ATOM    598  H   PHE   177      -6.920  -6.083  -9.732  1.00 15.00      A
ATOM    599  CA  PHE   177      -8.939  -6.511 -10.479  1.00 22.70      A
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FIGURE 17K

ATOM	600	CB	PHE	177	-9.746	-5.194	-10.599	1.00	20.90	A
ATOM	601	CG	PHE	177	-8.813	-4.034	-10.927	1.00	22.51	A
ATOM	602	CD1	PHE	177	-8.771	-3.548	-12.252	1.00	22.11	A
ATOM	603	CD2	PHE	177	-8.011	-3.422	-9.920	1.00	21.87	A
ATOM	604	CE1	PHE	177	-8.041	-2.387	-12.550	1.00	20.53	A
ATOM	605	CE2	PHE	177	-7.289	-2.247	-10.204	1.00	20.44	A
ATOM	606	CZ	PHE	177	-7.376	-1.713	-11.500	1.00	22.79	A
ATOM	607	C	PHE	177	-8.381	-6.949	-11.800	1.00	22.14	A
ATOM	608	O	PHE	177	-7.219	-6.695	-12.072	1.00	21.60	A
ATOM	609	N	CYS	178	-9.210	-7.555	-12.625	1.00	24.52	A
ATOM	610	H	CYS	178	-10.146	-7.797	-12.370	1.00	15.00	A
ATOM	611	CA	CYS	178	-8.599	-7.849	-13.942	1.00	29.77	A
ATOM	612	CB	CYS	178	-8.501	-9.365	-14.214	1.00	32.06	A
ATOM	613	SG	CYS	178	-7.685	-9.731	-15.792	1.00	35.17	A
ATOM	614	C	CYS	178	-9.323	-7.146	-15.088	1.00	28.41	A
ATOM	615	O	CYS	178	-10.534	-7.247	-15.185	1.00	27.54	A
ATOM	616	N	SER	179	-8.589	-6.393	-15.910	1.00	28.86	A
ATOM	617	H	SER	179	-7.608	-6.271	-15.754	1.00	15.00	A
ATOM	618	CA	SER	179	-9.374	-5.454	-16.704	1.00	29.01	A
ATOM	619	CB	SER	179	-9.379	-4.118	-16.020	1.00	30.82	A
ATOM	620	OG	SER	179	-10.615	-3.492	-16.319	1.00	39.79	A
ATOM	621	HG	SER	179	-10.725	-2.812	-15.667	1.00	15.00	A
ATOM	622	C	SER	179	-9.063	-5.196	-18.165	1.00	31.16	A
ATOM	623	O	SER	179	-7.931	-4.953	-18.537	1.00	28.58	A
ATOM	624	N	ASN	180	-10.083	-5.255	-19.042	1.00	35.32	A
ATOM	625	H	ASN	180	-10.966	-5.700	-18.834	1.00	15.00	A
ATOM	626	CA	ASN	180	-9.782	-4.725	-20.366	1.00	34.74	A
ATOM	627	CB	ASN	180	-10.205	-5.554	-21.589	1.00	37.96	A
ATOM	628	CG	ASN	180	-9.650	-4.980	-22.896	1.00	37.12	A
ATOM	629	OD1	ASN	180	-10.058	-3.947	-23.356	1.00	40.66	A
ATOM	630	ND2	ASN	180	-8.619	-5.536	-23.456	1.00	35.85	A
ATOM	631	HD21	ASN	180	-8.343	-6.475	-23.306	1.00	15.00	A
ATOM	632	HD22	ASN	180	-8.153	-4.891	-24.065	1.00	15.00	A
ATOM	633	C	ASN	180	-10.197	-3.331	-20.588	1.00	36.96	A
ATOM	634	O	ASN	180	-11.314	-2.894	-20.433	1.00	37.89	A
ATOM	635	N	ARG	181	-9.147	-2.699	-21.068	1.00	41.95	A
ATOM	636	H	ARG	181	-8.363	-3.318	-21.141	1.00	15.00	A
ATOM	637	CA	ARG	181	-8.997	-1.313	-21.489	1.00	44.24	A
ATOM	638	CB	ARG	181	-7.563	-1.279	-22.026	1.00	43.43	A
ATOM	639	CG	ARG	181	-6.348	-1.638	-21.101	1.00	45.11	A
ATOM	640	CD	ARG	181	-6.235	-2.853	-20.134	1.00	40.68	A
ATOM	641	NE	ARG	181	-5.064	-2.772	-19.271	1.00	46.11	A
ATOM	642	HE	ARG	181	-4.991	-2.058	-18.578	1.00	15.00	A
ATOM	643	CZ	ARG	181	-4.024	-3.611	-19.432	1.00	49.77	A
ATOM	644	NH1	ARG	181	-2.886	-3.414	-18.790	1.00	54.33	A
ATOM	645	HH11	ARG	181	-2.113	-4.032	-18.918	1.00	15.00	A
ATOM	646	HH12	ARG	181	-2.807	-2.642	-18.161	1.00	15.00	A
ATOM	647	NH2	ARG	181	-4.085	-4.641	-20.247	1.00	54.26	A
ATOM	648	HH21	ARG	181	-3.286	-5.230	-20.354	1.00	15.00	A
ATOM	649	HH22	ARG	181	-4.918	-4.833	-20.761	1.00	15.00	A
ATOM	650	C	ARG	181	-10.049	-0.866	-22.499	1.00	47.10	A
ATOM	651	O	ARG	181	-10.979	-0.112	-22.227	1.00	49.20	A
ATOM	652	N	GLU	182	-9.895	-1.447	-23.690	1.00	49.64	A
ATOM	653	H	GLU	182	-9.201	-2.166	-23.775	1.00	15.00	A
ATOM	654	CA	GLU	182	-10.976	-1.385	-24.676	1.00	52.41	A
ATOM	655	CB	GLU	182	-10.437	-2.020	-25.970	1.00	56.93	A
ATOM	656	CG	GLU	182	-10.932	-1.418	-27.295	1.00	66.05	A
ATOM	657	CD	GLU	182	-10.758	0.116	-27.327	1.00	70.54	A
ATOM	658	OE1	GLU	182	-9.613	0.586	-27.442	1.00	72.98	A
ATOM	659	OE2	GLU	182	-11.778	0.830	-27.244	1.00	72.46	A

FIGURE 17L

```
ATOM    660  C   GLU  182     -12.388  -1.934  -24.304  1.00 53.00  A
ATOM    661  O   GLU  182     -13.379  -1.492  -24.862  1.00 54.27  A
ATOM    662  N   ALA  183     -12.505  -2.877  -23.335  1.00 52.34  A
ATOM    663  H   ALA  183     -11.676  -3.173  -22.865  1.00 15.00  A
ATOM    664  CA  ALA  183     -13.867  -3.258  -22.899  1.00 50.19  A
ATOM    665  CB  ALA  183     -13.855  -4.721  -22.447  1.00 45.02  A
ATOM    666  C   ALA  183     -14.562  -2.321  -21.867  1.00 50.66  A
ATOM    667  O   ALA  183     -15.712  -1.945  -21.990  1.00 47.77  A
ATOM    668  N   SER  184     -13.773  -1.888  -20.878  1.00 52.95  A
ATOM    669  H   SER  184     -12.826  -2.172  -20.991  1.00 15.00  A
ATOM    670  CA  SER  184     -14.228  -1.043  -19.729  1.00 56.78  A
ATOM    671  CB  SER  184     -13.384  -1.397  -18.481  1.00 53.58  A
ATOM    672  OG  SER  184     -13.975  -2.448  -17.721  1.00 47.46  A
ATOM    673  HG  SER  184     -13.291  -3.019  -17.388  1.00 15.00  A
ATOM    674  C   SER  184     -14.183   0.517  -19.880  1.00 59.95  A
ATOM    675  O   SER  184     -13.913   1.297  -18.964  1.00 65.25  A
ATOM    676  N   SER  185     -14.324   0.995  -21.131  1.00 60.08  A
ATOM    677  H   SER  185     -14.623   0.345  -21.831  1.00 15.00  A
ATOM    678  CA  SER  185     -13.825   2.375  -21.391  1.00 60.12  A
ATOM    679  CB  SER  185     -13.522   2.640  -22.869  1.00 60.49  A
ATOM    680  OG  SER  185     -12.243   2.098  -23.242  1.00 59.80  A
ATOM    681  HG  SER  185     -12.158   1.234  -22.833  1.00 15.00  A
ATOM    682  C   SER  185     -14.580   3.589  -20.885  1.00 59.59  A
ATOM    683  O   SER  185     -15.437   4.159  -21.543  1.00 60.08  A
ATOM    684  N   GLN  186     -14.200   3.990  -19.670  1.00 57.71  A
ATOM    685  H   GLN  186     -13.601   3.376  -19.153  1.00 15.00  A
ATOM    686  CA  GLN  186     -15.121   4.936  -18.993  1.00 57.00  A
ATOM    687  CB  GLN  186     -16.094   4.062  -18.175  1.00 58.66  A
ATOM    688  CG  GLN  186     -15.355   3.354  -17.050  1.00 59.69  A
ATOM    689  CD  GLN  186     -16.369   2.789  -16.088  1.00 59.92  A
ATOM    690  OE1 GLN  186     -17.270   3.513  -15.687  1.00 59.81  A
ATOM    691  NE2 GLN  186     -16.249   1.503  -15.787  1.00 59.63  A
ATOM    692 HE21 GLN  186     -15.492   0.948  -16.113  1.00 15.00  A
ATOM    693 HE22 GLN  186     -16.950   1.119  -15.168  1.00 15.00  A
ATOM    694  C   GLN  186     -14.758   6.290  -18.221  1.00 54.36  A
ATOM    695  O   GLN  186     -15.596   7.198  -18.298  1.00 53.98  A
ATOM    696  N   ALA  187     -13.566   6.424  -17.511  1.00 50.35  A
ATOM    697  H   ALA  187     -13.476   7.274  -16.970  1.00 15.00  A
ATOM    698  CA  ALA  187     -12.388   5.599  -17.832  1.00 43.26  A
ATOM    699  CB  ALA  187     -11.546   6.284  -18.918  1.00 38.95  A
ATOM    700  C   ALA  187     -11.456   4.882  -16.849  1.00 40.48  A
ATOM    701  O   ALA  187     -10.887   3.875  -17.295  1.00 43.24  A
ATOM    702  N   PRO  188     -11.210   5.383  -15.594  1.00 38.66  A
ATOM    703  CD  PRO  188     -11.543   6.687  -15.000  1.00 38.15  A
ATOM    704  CA  PRO  188     -10.220   4.665  -14.751  1.00 35.94  A
ATOM    705  CB  PRO  188      -9.395   5.813  -14.150  1.00 33.99  A
ATOM    706  CG  PRO  188     -10.377   7.000  -14.036  1.00 32.69  A
ATOM    707  C   PRO  188     -10.840   3.783  -13.683  1.00 33.66  A
ATOM    708  O   PRO  188     -11.885   4.062  -13.140  1.00 33.41  A
ATOM    709  N   PHE  189     -10.147   2.695  -13.346  1.00 28.66  A
ATOM    710  H   PHE  189      -9.260   2.508  -13.748  1.00 15.00  A
ATOM    711  CA  PHE  189     -10.721   2.013  -12.171  1.00 26.71  A
ATOM    712  CB  PHE  189     -10.122   0.601  -12.034  1.00 26.21  A
ATOM    713  CG  PHE  189     -10.671  -0.189  -10.849  1.00 22.92  A
ATOM    714  CD1 PHE  189     -10.126   0.005   -9.566  1.00 17.72  A
ATOM    715  CD2 PHE  189     -11.687  -1.165  -11.064  1.00 21.88  A
ATOM    716  CE1 PHE  189     -10.590  -0.815   -8.522  1.00 19.12  A
ATOM    717  CE2 PHE  189     -12.124  -1.995  -10.011  1.00 21.13  A
ATOM    718  CZ  PHE  189     -11.571  -1.806   -8.736  1.00 18.44  A
ATOM    719  C   PHE  189     -10.445   2.815  -10.909  1.00 27.14  A
```

FIGURE 17M

ATOM	720	O	PHE	189	-9.308	3.244	-10.706	1.00	28.72	A
ATOM	721	N	ILE	190	-11.468	2.964	-10.071	1.00	24.71	A
ATOM	722	H	ILE	190	-12.408	2.786	-10.388	1.00	25.00	A
ATOM	723	CA	ILE	190	-11.193	3.626	-8.788	1.00	24.03	A
ATOM	724	CB	ILE	190	-11.316	5.242	-8.743	1.00	26.86	A
ATOM	725	CG2	ILE	190	-11.892	5.979	-9.997	1.00	19.87	A
ATOM	726	CG1	ILE	190	-11.801	5.888	-7.424	1.00	22.54	A
ATOM	727	CD1	ILE	190	-12.819	7.012	-7.645	1.00	28.56	A
ATOM	728	C	ILE	190	-11.844	2.812	-7.656	1.00	21.97	A
ATOM	729	O	ILE	190	-12.891	2.197	-7.801	1.00	16.30	A
ATOM	730	N	ALA	191	-11.026	2.700	-6.590	1.00	17.21	A
ATOM	731	H	ALA	191	-10.124	3.124	-6.662	1.00	15.00	A
ATOM	732	CA	ALA	191	-11.501	2.195	-5.321	1.00	15.20	A
ATOM	733	CB	ALA	191	-10.730	0.928	-4.968	1.00	14.79	A
ATOM	734	C	ALA	191	-11.439	3.230	-4.206	1.00	17.11	A
ATOM	735	O	ALA	191	-10.467	3.961	-4.052	1.00	14.04	A
ATOM	736	N	SER	192	-12.511	3.245	-3.433	1.00	14.72	A
ATOM	737	H	SER	192	-13.277	2.694	-3.804	1.00	15.00	A
ATOM	738	CA	SER	192	-12.725	4.289	-2.423	1.00	16.69	A
ATOM	739	CB	SER	192	-13.931	5.144	-2.803	1.00	14.83	A
ATOM	740	OG	SER	192	-13.556	5.828	-3.994	1.00	21.23	A
ATOM	741	HG	SER	192	-14.367	5.966	-4.520	1.00	15.00	A
ATOM	742	C	SER	192	-12.980	3.682	-1.069	1.00	17.77	A
ATOM	743	O	SER	192	-13.753	2.738	-0.947	1.00	20.76	A
ATOM	744	N	LEU	193	-12.285	4.209	-0.038	1.00	15.56	A
ATOM	745	H	LEU	193	-11.681	4.959	-0.280	1.00	15.00	A
ATOM	746	CA	LEU	193	-12.510	3.761	1.366	1.00	13.27	A
ATOM	747	CB	LEU	193	-11.195	3.825	2.217	1.00	12.74	A
ATOM	748	CG	LEU	193	-11.051	3.141	3.604	1.00	14.37	A
ATOM	749	CD1	LEU	193	-12.272	2.354	4.116	1.00	14.67	A
ATOM	750	CD2	LEU	193	-10.274	3.986	4.622	1.00	12.64	A
ATOM	751	C	LEU	193	-13.497	4.748	1.911	1.00	11.22	A
ATOM	752	O	LEU	193	-13.188	5.912	1.903	1.00	12.22	A
ATOM	753	N	CYS	194	-14.652	4.326	2.310	1.00	13.66	A
ATOM	754	H	CYS	194	-14.828	3.347	2.276	1.00	15.00	A
ATOM	755	CA	CYS	194	-15.595	5.360	2.713	1.00	14.84	A
ATOM	756	CB	CYS	194	-16.915	5.409	1.918	1.00	17.58	A
ATOM	757	SG	CYS	194	-16.623	5.417	0.165	1.00	16.33	A
ATOM	758	C	CYS	194	-16.046	5.163	4.137	1.00	12.81	A
ATOM	759	O	CYS	194	-15.983	4.072	4.655	1.00	10.34	A
ATOM	760	N	LEU	195	-16.557	6.254	4.697	1.00	14.32	A
ATOM	761	H	LEU	195	-16.541	7.088	4.154	1.00	15.00	A
ATOM	762	CA	LEU	195	-17.039	6.291	6.076	1.00	14.89	A
ATOM	763	CB	LEU	195	-16.195	7.372	6.789	1.00	15.56	A
ATOM	764	CG	LEU	195	-16.571	7.680	8.242	1.00	15.56	A
ATOM	765	CD1	LEU	195	-15.932	8.967	8.762	1.00	13.72	A
ATOM	766	CD2	LEU	195	-16.463	6.448	9.154	1.00	17.25	A
ATOM	767	C	LEU	195	-18.546	6.544	6.209	1.00	13.54	A
ATOM	768	O	LEU	195	-19.038	7.521	5.705	1.00	14.56	A
ATOM	769	N	LYS	196	-19.238	5.667	6.905	1.00	16.36	A
ATOM	770	H	LYS	196	-18.719	4.875	7.197	1.00	15.00	A
ATOM	771	CA	LYS	196	-20.577	5.972	7.405	1.00	21.01	A
ATOM	772	CB	LYS	196	-21.475	4.726	7.146	1.00	22.66	A
ATOM	773	CG	LYS	196	-22.953	4.839	7.590	1.00	31.25	A
ATOM	774	CD	LYS	196	-23.364	4.915	9.104	1.00	40.25	A
ATOM	775	CE	LYS	196	-23.189	3.694	10.060	1.00	43.56	A
ATOM	776	NZ	LYS	196	-23.004	4.158	11.453	1.00	44.46	A
ATOM	777	HZ1	LYS	196	-22.182	4.799	11.467	1.00	15.00	A
ATOM	778	HZ2	LYS	196	-23.847	4.665	11.778	1.00	15.00	A
ATOM	779	HZ3	LYS	196	-22.807	3.334	12.066	1.00	15.00	A

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ATOM	780	C	LYS	196	-20.478	6.290	8.899	1.00	19.25	A
ATOM	781	O	LYS	196	-20.194	5.434	9.714	1.00	18.35	A
ATOM	782	N	SER	197	-20.664	7.534	9.272	1.00	20.63	A
ATOM	783	H	SER	197	-20.891	8.247	8.615	1.00	15.00	A
ATOM	784	CA	SER	197	-20.752	7.701	10.729	1.00	24.87	A
ATOM	785	CB	SER	197	-19.898	8.878	11.207	1.00	25.62	A
ATOM	786	OG	SER	197	-19.563	8.687	12.588	1.00	32.22	A
ATOM	787	HG	SER	197	-18.795	8.110	12.611	1.00	15.00	A
ATOM	788	C	SER	197	-22.216	7.810	11.218	1.00	26.33	A
ATOM	789	O	SER	197	-23.078	8.303	10.497	1.00	26.57	A
ATOM	790	N	PRO	198	-22.534	7.274	12.407	1.00	26.77	A
ATOM	791	CD	PRO	198	-21.649	6.526	13.301	1.00	32.92	A
ATOM	792	CA	PRO	198	-23.919	7.381	12.913	1.00	28.73	A
ATOM	793	CB	PRO	198	-23.784	6.789	14.318	1.00	32.89	A
ATOM	794	CG	PRO	198	-22.289	6.726	14.659	1.00	33.55	A
ATOM	795	C	PRO	198	-24.591	8.789	12.847	1.00	26.60	A
ATOM	796	O	PRO	198	-24.035	9.817	13.242	1.00	20.20	A
ATOM	797	N	GLY	199	-25.729	8.773	12.119	1.00	25.75	A
ATOM	798	H	GLY	199	-26.170	7.857	12.057	1.00	15.00	A
ATOM	799	CA	GLY	199	-26.486	10.003	11.790	1.00	26.91	A
ATOM	800	C	GLY	199	-25.821	10.971	10.816	1.00	28.98	A
ATOM	801	O	GLY	199	-26.084	12.151	10.797	1.00	31.05	A
ATOM	802	N	ARG	200	-24.898	10.464	10.001	1.00	30.15	A
ATOM	803	H	ARG	200	-24.629	9.519	10.165	1.00	15.00	A
ATOM	804	CA	ARG	200	-24.140	11.384	9.166	1.00	28.98	A
ATOM	805	CB	ARG	200	-22.749	11.590	9.783	1.00	33.16	A
ATOM	806	CG	ARG	200	-22.739	12.290	11.162	1.00	38.34	A
ATOM	807	CD	ARG	200	-21.327	12.530	11.705	1.00	42.14	A
ATOM	808	NE	ARG	200	-21.292	12.875	13.131	1.00	43.64	A
ATOM	809	HE	ARG	200	-21.327	13.831	13.424	1.00	15.00	A
ATOM	810	CZ	ARG	200	-21.138	11.896	14.051	1.00	46.40	A
ATOM	811	NH1	ARG	200	-21.219	10.603	13.733	1.00	46.31	A
ATOM	812	HH11	ARG	200	-21.104	9.910	14.445	1.00	15.00	A
ATOM	813	HH12	ARG	200	-21.394	10.320	12.789	1.00	15.00	A
ATOM	814	NH2	ARG	200	-20.901	12.226	15.311	1.00	46.65	A
ATOM	815	HH21	ARG	200	-20.847	13.193	15.566	1.00	15.00	A
ATOM	816	HH22	ARG	200	-20.785	11.510	16.002	1.00	15.00	A
ATOM	817	C	ARG	200	-24.084	10.967	7.710	1.00	27.77	A
ATOM	818	O	ARG	200	-24.264	9.791	7.449	1.00	28.21	A
ATOM	819	N	PHE	201	-23.853	11.926	6.792	1.00	30.83	A
ATOM	820	H	PHE	201	-23.513	12.821	7.126	1.00	15.00	A
ATOM	821	CA	PHE	201	-24.016	11.708	5.339	1.00	34.17	A
ATOM	822	CB	PHE	201	-23.851	12.996	4.572	1.00	31.58	A
ATOM	823	CG	PHE	201	-25.154	13.730	4.614	1.00	34.85	A
ATOM	824	CD1	PHE	201	-25.174	15.062	5.081	1.00	37.56	A
ATOM	825	CD2	PHE	201	-26.335	13.081	4.190	1.00	37.89	A
ATOM	826	CE1	PHE	201	-26.397	15.749	5.182	1.00	36.91	A
ATOM	827	CE2	PHE	201	-27.566	13.762	4.280	1.00	38.98	A
ATOM	828	CZ	PHE	201	-27.572	15.065	4.815	1.00	37.61	A
ATOM	829	C	PHE	201	-23.277	10.605	4.545	1.00	39.40	A
ATOM	830	O	PHE	201	-23.853	10.034	3.604	1.00	45.71	A
ATOM	831	N	GLU	202	-22.031	10.316	5.034	1.00	35.75	A
ATOM	832	H	GLU	202	-21.878	10.753	5.925	1.00	15.00	A
ATOM	833	CA	GLU	202	-20.964	9.564	4.318	1.00	34.52	A
ATOM	834	CB	GLU	202	-21.295	8.540	3.234	1.00	33.66	A
ATOM	835	CG	GLU	202	-21.924	7.245	3.713	1.00	40.61	A
ATOM	836	CD	GLU	202	-22.647	6.505	2.561	1.00	46.12	A
ATOM	837	OE1	GLU	202	-23.461	5.613	2.886	1.00	46.89	A
ATOM	838	OE2	GLU	202	-22.417	6.814	1.370	1.00	45.63	A
ATOM	839	C	GLU	202	-19.924	10.450	3.717	1.00	29.99	A

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ATOM	840	O	GLU	202	-20.137	11.567	3.300	1.00	30.76	A
ATOM	841	N	ARG	203	-18.728	9.897	3.856	1.00	26.88	A
ATOM	842	H	ARG	203	-18.690	8.998	4.285	1.00	15.00	A
ATOM	843	CA	ARG	203	-17.539	10.603	3.358	1.00	21.85	A
ATOM	844	CB	ARG	203	-16.819	11.410	4.457	1.00	27.07	A
ATOM	845	CG	ARG	203	-17.681	12.187	5.467	1.00	37.32	A
ATOM	846	CD	ARG	203	-16.894	13.213	6.339	1.00	48.09	A
ATOM	847	NE	ARG	203	-15.911	12.667	7.308	1.00	56.90	A
ATOM	848	HE	ARG	203	-16.240	12.433	8.223	1.00	15.00	A
ATOM	849	CZ	ARG	203	-14.572	12.475	7.001	1.00	66.77	A
ATOM	850	NH1	ARG	203	-13.702	12.002	7.911	1.00	68.44	A
ATOM	851	HH11	ARG	203	-12.745	11.829	7.666	1.00	15.00	A
ATOM	852	HH12	ARG	203	-14.016	11.822	8.845	1.00	15.00	A
ATOM	853	NH2	ARG	203	-14.084	12.716	5.766	1.00	67.68	A
ATOM	854	HH21	ARG	203	-14.670	13.108	5.060	1.00	15.00	A
ATOM	855	HH22	ARG	203	-13.143	12.499	5.544	1.00	15.00	A
ATOM	856	C	ARG	203	-16.517	9.633	2.678	1.00	17.71	A
ATOM	857	O	ARG	203	-16.375	8.418	2.931	1.00	7.69	A
ATOM	858	N	ILE	204	-15.789	10.253	1.791	1.00	14.42	A
ATOM	859	H	ILE	204	-15.915	11.228	1.561	1.00	15.00	A
ATOM	860	CA	ILE	204	-14.662	9.482	1.353	1.00	18.32	A
ATOM	861	CB	ILE	204	-14.520	9.392	-0.231	1.00	24.52	A
ATOM	862	CG2	ILE	204	-15.820	9.529	-1.069	1.00	21.85	A
ATOM	863	CG1	ILE	204	-13.439	10.195	-0.949	1.00	26.35	A
ATOM	864	CD1	ILE	204	-13.992	11.231	-1.961	1.00	36.33	A
ATOM	865	C	ILE	204	-13.387	9.819	2.153	1.00	16.58	A
ATOM	866	O	ILE	204	-13.070	10.956	2.457	1.00	18.63	A
ATOM	867	N	LEU	205	-12.718	8.725	2.571	1.00	13.32	A
ATOM	868	H	LEU	205	-13.142	7.853	2.321	1.00	15.00	A
ATOM	869	CA	LEU	205	-11.467	8.829	3.322	1.00	10.01	A
ATOM	870	CB	LEU	205	-11.440	7.688	4.382	1.00	6.66	A
ATOM	871	CG	LEU	205	-12.571	7.727	5.441	1.00	7.99	A
ATOM	872	CD1	LEU	205	-12.722	9.088	6.089	1.00	8.78	A
ATOM	873	CD2	LEU	205	-12.419	6.720	6.582	1.00	8.08	A
ATOM	874	C	LEU	205	-10.268	8.811	2.377	1.00	9.75	A
ATOM	875	O	LEU	205	-9.416	9.655	2.320	1.00	10.25	A
ATOM	876	N	LEU	206	-10.252	7.769	1.562	1.00	10.28	A
ATOM	877	H	LEU	206	-10.991	7.119	1.684	1.00	15.00	A
ATOM	878	CA	LEU	206	-9.166	7.555	0.610	1.00	10.02	A
ATOM	879	CB	LEU	206	-8.249	6.384	0.990	1.00	11.94	A
ATOM	880	CG	LEU	206	-7.001	6.527	1.859	1.00	14.40	A
ATOM	881	CD1	LEU	206	-7.094	5.595	3.074	1.00	14.49	A
ATOM	882	CD2	LEU	206	-6.531	7.958	2.151	1.00	8.78	A
ATOM	883	C	LEU	206	-9.756	7.071	-0.697	1.00	11.91	A
ATOM	884	O	LEU	206	-10.792	6.406	-0.778	1.00	10.67	A
ATOM	885	N	ARG	207	-9.005	7.428	-1.720	1.00	8.06	A
ATOM	886	H	ARG	207	-8.196	7.992	-1.553	1.00	15.00	A
ATOM	887	CA	ARG	207	-9.309	6.823	-2.992	1.00	10.45	A
ATOM	888	CB	ARG	207	-9.974	7.790	-3.904	1.00	8.71	A
ATOM	889	CG	ARG	207	-11.258	8.270	-3.357	1.00	15.68	A
ATOM	890	CD	ARG	207	-11.652	9.459	-4.163	1.00	22.25	A
ATOM	891	NE	ARG	207	-12.670	9.192	-5.171	1.00	29.59	A
ATOM	892	HE	ARG	207	-13.115	8.300	-5.249	1.00	15.00	A
ATOM	893	CZ	ARG	207	-13.063	10.272	-5.919	1.00	40.09	A
ATOM	894	NH1	ARG	207	-12.482	11.498	-5.813	1.00	36.32	A
ATOM	895	HH11	ARG	207	-12.813	12.246	-6.391	1.00	15.00	A
ATOM	896	HH12	ARG	207	-11.737	11.651	-5.165	1.00	15.00	A
ATOM	897	NH2	ARG	207	-14.067	10.111	-6.773	1.00	40.86	A
ATOM	898	HH21	ARG	207	-14.392	10.877	-7.329	1.00	15.00	A
ATOM	899	HH22	ARG	207	-14.498	9.207	-6.853	1.00	15.00	A

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ATOM	900	C	ARG	207	-8.044	6.456	-3.741	1.00	12.59	A
ATOM	901	O	ARG	207	-7.053	7.150	-3.787	1.00	15.58	A
ATOM	902	N	ALA	208	-8.096	5.358	-4.465	1.00	17.06	A
ATOM	903	H	ALA	208	-8.879	4.758	-4.355	1.00	15.00	A
ATOM	904	CA	ALA	208	-7.025	5.128	-5.465	1.00	17.00	A
ATOM	905	CB	ALA	208	-6.052	4.020	-5.072	1.00	14.69	A
ATOM	906	C	ALA	208	-7.544	4.830	-6.854	1.00	20.46	A
ATOM	907	O	ALA	208	-8.438	4.020	-7.057	1.00	21.89	A
ATOM	908	N	ALA	209	-6.986	5.586	-7.808	1.00	26.22	A
ATOM	909	H	ALA	209	-6.280	6.235	-7.533	1.00	15.00	A
ATOM	910	CA	ALA	209	-7.253	5.208	-9.196	1.00	28.06	A
ATOM	911	CB	ALA	209	-7.702	6.380	-10.069	1.00	27.10	A
ATOM	912	C	ALA	209	-6.075	4.461	-9.832	1.00	32.54	A
ATOM	913	O	ALA	209	-4.895	4.726	-9.593	1.00	33.00	A
ATOM	914	N	ASN	210	-6.502	3.491	-10.634	1.00	32.11	A
ATOM	915	H	ASN	210	-7.466	3.249	-10.531	1.00	15.00	A
ATOM	916	CA	ASN	210	-5.674	2.893	-11.662	1.00	36.00	A
ATOM	917	CB	ASN	210	-5.366	1.446	-11.355	1.00	39.53	A
ATOM	918	CG	ASN	210	-4.463	1.366	-10.154	1.00	42.59	A
ATOM	919	OD1	ASN	210	-4.285	2.273	-9.342	1.00	39.26	A
ATOM	920	ND2	ASN	210	-3.951	0.165	-10.055	1.00	41.77	A
ATOM	921	HD21	ASN	210	-3.990	-0.479	-10.817	1.00	15.00	A
ATOM	922	HD22	ASN	210	-3.364	-0.081	-9.279	1.00	15.00	A
ATOM	923	C	ASN	210	-6.299	2.931	-13.043	1.00	36.95	A
ATOM	924	O	ASN	210	-7.492	2.752	-13.259	1.00	36.93	A
ATOM	925	N	THR	211	-5.447	3.168	-14.013	1.00	37.83	A
ATOM	926	H	THR	211	-4.484	3.377	-13.821	1.00	15.00	A
ATOM	927	CA	THR	211	-6.119	3.224	-15.314	1.00	41.27	A
ATOM	928	CB	THR	211	-5.325	4.158	-16.268	1.00	44.53	A
ATOM	929	OG1	THR	211	-6.076	4.506	-17.438	1.00	49.34	A
ATOM	930	HG1	THR	211	-6.032	5.493	-17.508	1.00	15.00	A
ATOM	931	CG2	THR	211	-3.926	3.604	-16.581	1.00	46.08	A
ATOM	932	C	THR	211	-6.434	1.833	-15.878	1.00	39.17	A
ATOM	933	O	THR	211	-5.822	0.863	-15.475	1.00	36.48	A
ATOM	934	N	HIS	212	-7.416	1.718	-16.789	1.00	37.14	A
ATOM	935	H	HIS	212	-8.106	2.438	-16.878	1.00	15.00	A
ATOM	936	CA	HIS	212	-7.294	0.454	-17.529	1.00	33.23	A
ATOM	937	CB	HIS	212	-8.680	-0.012	-18.082	1.00	27.73	A
ATOM	938	CG	HIS	212	-9.856	0.060	-17.111	1.00	24.58	A
ATOM	939	ND1	HIS	212	-10.862	0.967	-17.161	1.00	24.59	A
ATOM	940	HD1	HIS	212	-11.000	1.702	-17.794	1.00	15.00	A
ATOM	941	CD2	HIS	212	-10.049	-0.723	-15.985	1.00	20.65	A
ATOM	942	NE2	HIS	212	-11.154	-0.265	-15.383	1.00	24.01	A
ATOM	943	CE1	HIS	212	-11.665	0.780	-16.092	1.00	17.59	A
ATOM	944	C	HIS	212	-6.257	0.633	-18.683	1.00	38.31	A
ATOM	945	O	HIS	212	-5.363	-0.132	-18.923	1.00	33.92	A
ATOM	946	N	SER	213	-6.444	1.737	-19.443	1.00	46.63	A
ATOM	947	H	SER	213	-7.156	2.323	-19.055	1.00	15.00	A
ATOM	948	CA	SER	213	-5.705	2.177	-20.675	1.00	53.91	A
ATOM	949	CB	SER	213	-4.272	2.704	-20.400	1.00	52.61	A
ATOM	950	OG	SER	213	-3.266	1.697	-20.547	1.00	53.97	A
ATOM	951	HG	SER	213	-3.363	1.064	-19.823	1.00	15.00	A
ATOM	952	C	SER	213	-5.844	1.508	-22.097	1.00	60.03	A
ATOM	953	O	SER	213	-5.005	0.811	-22.682	1.00	61.19	A
ATOM	954	N	SER	214	-7.043	1.803	-22.686	1.00	64.96	A
ATOM	955	H	SER	214	-7.705	2.322	-22.146	1.00	15.00	A
ATOM	956	CA	SER	214	-7.463	1.456	-24.094	1.00	69.62	A
ATOM	957	CB	SER	214	8.727	2.218	-24.495	1.00	67.82	A
ATOM	958	OG	SER	214	-9.563	2.257	-23.336	1.00	67.64	A
ATOM	959	HG	SER	214	-10.468	2.398	-23.623	1.00	15.00	A

FIGURE 17Q

ATOM	960	C	SER	214	-6.518	1.587	-25.300	1.00	72.08	A
ATOM	961	O	SER	214	-6.102	2.683	-25.686	1.00	73.45	A
ATOM	962	N	ALA	215	-6.175	0.409	-25.899	1.00	73.38	A
ATOM	963	H	ALA	215	-5.456	0.596	-26.565	1.00	15.00	A
ATOM	964	CA	ALA	215	-6.858	-0.915	-25.753	1.00	72.62	A
ATOM	965	CB	ALA	215	-7.199	-1.505	-27.138	1.00	73.08	A
ATOM	966	C	ALA	215	-6.331	-2.148	-24.983	1.00	72.11	A
ATOM	967	O	ALA	215	-7.020	-3.161	-25.069	1.00	72.74	A
ATOM	968	N	LYS	216	-5.153	-2.076	-24.282	1.00	70.17	A
ATOM	969	H	LYS	216	-4.747	-1.165	-24.199	1.00	15.00	A
ATOM	970	CA	LYS	216	-4.482	-3.256	-23.626	1.00	67.38	A
ATOM	971	CB	LYS	216	-3.458	-2.691	-22.648	1.00	65.30	A
ATOM	972	CG	LYS	216	-2.217	-2.107	-23.321	1.00	66.86	A
ATOM	973	CD	LYS	216	-1.419	-3.149	-24.134	1.00	68.81	A
ATOM	974	CE	LYS	216	-0.082	-2.674	-24.740	1.00	67.51	A
ATOM	975	NZ	LYS	216	0.483	-3.722	-25.598	1.00	67.80	A
ATOM	976	HZ1	LYS	216	0.620	-4.590	-25.041	1.00	15.00	A
ATOM	977	HZ2	LYS	216	-0.168	-3.914	-26.385	1.00	15.00	A
ATOM	978	HZ3	LYS	216	1.401	-3.406	-25.973	1.00	15.00	A
ATOM	979	C	LYS	216	-5.321	-4.441	-22.993	1.00	66.99	A
ATOM	980	O	LYS	216	-6.462	-4.266	-22.575	1.00	69.90	A
ATOM	981	N	PRO	217	-4.835	-5.724	-22.952	1.00	65.06	A
ATOM	982	CD	PRO	217	-3.525	-6.262	-23.308	1.00	67.91	A
ATOM	983	CA	PRO	217	-5.792	-6.827	-22.626	1.00	62.80	A
ATOM	984	CB	PRO	217	-5.285	-8.004	-23.464	1.00	64.33	A
ATOM	985	CG	PRO	217	-3.755	-7.799	-23.338	1.00	69.63	A
ATOM	986	C	PRO	217	-5.837	-7.237	-21.150	1.00	59.77	A
ATOM	987	O	PRO	217	-4.747	-7.318	-20.589	1.00	58.81	A
ATOM	988	N	CYS	218	-7.115	-7.516	-20.627	1.00	55.45	A
ATOM	989	H	CYS	218	-7.874	-7.287	-21.233	1.00	15.00	A
ATOM	990	CA	CYS	218	-7.433	-7.929	-19.210	1.00	46.55	A
ATOM	991	CB	CYS	218	-8.105	-9.289	-19.079	1.00	44.69	A
ATOM	992	SG	CYS	218	-8.855	-9.822	-17.460	1.00	43.11	A
ATOM	993	C	CYS	218	-6.265	-7.994	-18.263	1.00	43.24	A
ATOM	994	O	CYS	218	-5.720	-9.026	-17.959	1.00	44.68	A
ATOM	995	N	GLY	219	-5.853	-6.820	-17.876	1.00	40.28	A
ATOM	996	H	GLY	219	-6.328	-5.961	-18.059	1.00	15.00	A
ATOM	997	CA	GLY	219	-4.659	-6.828	-17.070	1.00	36.27	A
ATOM	998	C	GLY	219	-5.017	-7.080	-15.643	1.00	33.86	A
ATOM	999	O	GLY	219	-5.906	-6.452	-15.097	1.00	34.90	A
ATOM	1000	N	GLN	220	-4.313	-7.996	-15.023	1.00	33.15	A
ATOM	1001	H	GLN	220	-3.835	-8.684	-15.580	1.00	15.00	A
ATOM	1002	CA	GLN	220	-4.448	-7.929	-13.578	1.00	29.92	A
ATOM	1003	CB	GLN	220	-4.298	-9.282	-12.936	1.00	27.81	A
ATOM	1004	CG	GLN	220	-5.380	-9.340	-11.883	1.00	30.94	A
ATOM	1005	CD	GLN	220	-5.285	-10.631	-11.132	1.00	36.37	A
ATOM	1006	OE1	GLN	220	-4.216	-10.969	-10.661	1.00	38.47	A
ATOM	1007	NE2	GLN	220	-6.425	-11.296	-10.977	1.00	37.61	A
ATOM	1008	HE21	GLN	220	-6.295	-12.235	-10.667	1.00	15.00	A
ATOM	1009	HE22	GLN	220	-7.373	-11.036	-11.200	1.00	15.00	A
ATOM	1010	C	GLN	220	-3.666	-6.845	-12.859	1.00	27.48	A
ATOM	1011	O	GLN	220	-2.461	-6.694	-12.999	1.00	27.61	A
ATOM	1012	N	GLN	221	-4.438	-6.040	-12.110	1.00	25.10	A
ATOM	1013	H	GLN	221	-5.433	-6.174	-12.143	1.00	15.00	A
ATOM	1014	CA	GLN	221	-3.803	-4.929	-11.387	1.00	22.41	A
ATOM	1015	CB	GLN	221	-4.077	-3.528	-11.949	1.00	22.12	A
ATOM	1016	CG	GLN	221	-3.284	-3.029	-13.163	1.00	32.16	A
ATOM	1017	CD	GLN	221	-3.795	-1.637	-13.405	1.00	34.69	A
ATOM	1018	OE1	GLN	221	-3.746	-0.763	-12.558	1.00	42.12	A
ATOM	1019	NE2	GLN	221	-4.648	-1.507	-14.398	1.00	34.93	A

FIGURE 17R

ATOM	1020	HE21	GLN	221	-4.981	-2.187	-15.042	1.00	15.00	A
ATOM	1021	HE22	GLN	221	-4.844	-0.551	-14.575	1.00	15.00	A
ATOM	1022	C	GLN	221	-4.227	-4.913	-9.948	1.00	19.54	A
ATOM	1023	O	GLN	221	-5.300	-5.381	-9.611	1.00	19.46	A
ATOM	1024	N	SER	222	-3.374	-4.330	-9.123	1.00	18.12	A
ATOM	1025	H	SER	222	-2.442	-4.098	-9.441	1.00	15.00	A
ATOM	1026	CA	SER	222	-3.851	-4.120	-7.752	1.00	19.45	A
ATOM	1027	CB	SER	222	-3.104	-4.947	-6.691	1.00	19.99	A
ATOM	1028	OG	SER	222	-3.096	-6.339	-7.053	1.00	24.64	A
ATOM	1029	HG	SER	222	-2.651	-6.336	-7.904	1.00	15.00	A
ATOM	1030	C	SER	222	-3.731	-2.688	-7.330	1.00	24.09	A
ATOM	1031	O	SER	222	-2.992	-1.929	-7.944	1.00	29.41	A
ATOM	1032	N	ILE	223	-4.534	-2.386	-6.283	1.00	22.81	A
ATOM	1033	H	ILE	223	-5.172	-3.127	-6.074	1.00	15.00	A
ATOM	1034	CA	ILE	223	-4.567	-1.122	-5.530	1.00	21.06	A
ATOM	1035	CB	ILE	223	-5.970	-0.490	-5.852	1.00	19.87	A
ATOM	1036	CG2	ILE	223	-6.564	0.315	-4.673	1.00	16.59	A
ATOM	1037	CG1	ILE	223	-5.911	0.278	-7.188	1.00	15.22	A
ATOM	1038	CD1	ILE	223	-7.229	0.868	-7.709	1.00	20.54	A
ATOM	1039	C	ILE	223	-4.367	-1.446	-4.007	1.00	21.62	A
ATOM	1040	O	ILE	223	-5.098	-2.269	-3.444	1.00	19.58	A
ATOM	1041	N	HIS	224	-3.429	-0.767	-3.340	1.00	19.73	A
ATOM	1042	H	HIS	224	-2.794	-0.230	-3.899	1.00	15.00	A
ATOM	1043	CA	HIS	224	-3.497	-0.671	-1.858	1.00	16.45	A
ATOM	1044	CB	HIS	224	-2.164	-1.183	-1.227	1.00	18.74	A
ATOM	1045	CG	HIS	224	-2.182	-1.442	0.296	1.00	14.92	A
ATOM	1046	ND1	HIS	224	-2.479	-2.628	0.682	1.00	15.33	A
ATOM	1047	HD1	HIS	224	-2.667	-3.515	0.505	1.00	15.00	A
ATOM	1048	CD2	HIS	224	-1.964	-0.524	1.310	1.00	13.79	A
ATOM	1049	NE2	HIS	224	-2.137	-1.127	2.517	1.00	10.52	A
ATOM	1050	CE1	HIS	224	-2.458	-2.411	2.232	1.00	11.70	A
ATOM	1051	C	HIS	224	-3.914	0.699	-1.284	1.00	15.18	A
ATOM	1052	O	HIS	224	-3.338	1.732	-1.520	1.00	14.36	A
ATOM	1053	N	LEU	225	-4.970	0.673	-0.468	1.00	16.85	A
ATOM	1054	H	LEU	225	-5.317	-0.238	-0.252	1.00	15.00	A
ATOM	1055	CA	LEU	225	-5.395	1.885	0.256	1.00	15.55	A
ATOM	1056	CB	LEU	225	-6.927	2.082	0.208	1.00	17.15	A
ATOM	1057	CG	LEU	225	-7.495	2.456	-1.154	1.00	18.03	A
ATOM	1058	CD1	LEU	225	-6.792	3.659	-1.774	1.00	19.34	A
ATOM	1059	CD2	LEU	225	-8.994	2.659	-1.098	1.00	13.66	A
ATOM	1060	C	LEU	225	-5.074	1.758	1.739	1.00	14.77	A
ATOM	1061	O	LEU	225	-5.347	0.726	2.345	1.00	12.20	A
ATOM	1062	N	GLY	226	-4.544	2.829	2.344	1.00	18.04	A
ATOM	1063	H	GLY	226	-4.218	3.616	1.813	1.00	15.00	A
ATOM	1064	CA	GLY	226	-4.541	2.833	3.841	1.00	18.37	A
ATOM	1065	C	GLY	226	-4.193	4.171	4.544	1.00	17.08	A
ATOM	1066	O	GLY	226	-3.389	4.906	4.055	1.00	13.75	A
ATOM	1067	N	GLY	227	-4.781	4.457	5.725	1.00	16.30	A
ATOM	1068	H	GLY	227	-5.434	3.771	6.036	1.00	15.00	A
ATOM	1069	CA	GLY	227	-4.379	5.649	6.490	1.00	8.52	A
ATOM	1070	C	GLY	227	-4.935	5.631	7.959	1.00	12.75	A
ATOM	1071	O	GLY	227	-5.651	4.748	8.466	1.00	10.57	A
ATOM	1072	N	VAL	228	-4.588	6.698	8.675	1.00	9.23	A
ATOM	1073	H	VAL	228	-4.040	7.398	8.222	1.00	15.00	A
ATOM	1074	CA	VAL	228	-5.110	6.818	10.067	1.00	11.74	A
ATOM	1075	CB	VAL	228	-4.085	7.320	11.144	1.00	14.30	A
ATOM	1076	CG1	VAL	228	-2.830	6.445	11.333	1.00	10.73	A
ATOM	1077	CG2	VAL	228	-4.789	7.565	12.479	1.00	17.07	A
ATOM	1078	C	VAL	228	-6.238	7.803	10.098	1.00	9.03	A
ATOM	1079	O	VAL	228	-6.089	8.937	9.649	1.00	12.01	A

FIGURE 17S

ATOM	1080	N	PHE	229	-7.347	7.299	10.640	1.00	9.86	A
ATOM	1081	H	PHE	229	-7.329	6.332	10.922	1.00	15.00	A
ATOM	1082	CA	PHE	229	-8.566	8.106	10.772	1.00	11.18	A
ATOM	1083	CB	PHE	229	-9.578	7.687	9.686	1.00	8.01	A
ATOM	1084	CG	PHE	229	-9.063	7.912	8.233	1.00	8.40	A
ATOM	1085	CD1	PHE	229	-9.140	9.196	7.649	1.00	10.03	A
ATOM	1086	CD2	PHE	229	-8.433	6.883	7.517	1.00	6.57	A
ATOM	1087	CE1	PHE	229	-8.512	9.443	6.395	1.00	5.18	A
ATOM	1088	CE2	PHE	229	-7.771	7.128	6.282	1.00	4.26	A
ATOM	1089	CZ	PHE	229	-7.813	8.424	5.731	1.00	5.71	A
ATOM	1090	C	PHE	229	-9.202	8.014	12.197	1.00	14.39	A
ATOM	1091	O	PHE	229	-9.116	7.000	12.870	1.00	13.92	A
ATOM	1092	N	GLU	230	-9.863	9.064	12.672	1.00	17.93	A
ATOM	1093	H	GLU	230	-9.912	9.892	12.113	1.00	15.00	A
ATOM	1094	CA	GLU	230	-10.856	8.944	13.770	1.00	18.08	A
ATOM	1095	CB	GLU	230	-11.218	10.303	14.393	1.00	16.17	A
ATOM	1096	CG	GLU	230	-11.068	10.090	15.889	1.00	27.69	A
ATOM	1097	CD	GLU	230	-12.314	10.091	16.805	1.00	33.06	A
ATOM	1098	OE1	GLU	230	-13.355	10.707	16.552	1.00	38.26	A
ATOM	1099	OE2	GLU	230	-12.218	9.477	17.863	1.00	38.14	A
ATOM	1100	C	GLU	230	-12.225	8.268	13.453	1.00	18.70	A
ATOM	1101	O	GLU	230	-12.967	8.519	12.492	1.00	21.58	A
ATOM	1102	N	LEU	231	-12.542	7.334	14.361	1.00	13.79	A
ATOM	1103	H	LEU	231	-11.840	7.125	15.015	1.00	15.00	A
ATOM	1104	CA	LEU	231	-13.885	6.836	14.330	1.00	13.52	A
ATOM	1105	CB	LEU	231	-13.954	5.378	14.002	1.00	13.90	A
ATOM	1106	CG	LEU	231	-13.199	5.064	12.725	1.00	15.44	A
ATOM	1107	CD1	LEU	231	-13.781	5.712	11.436	1.00	10.24	A
ATOM	1108	CD2	LEU	231	-12.970	3.569	12.769	1.00	11.74	A
ATOM	1109	C	LEU	231	-14.638	7.074	15.591	1.00	14.88	A
ATOM	1110	O	LEU	231	-14.145	6.912	16.692	1.00	12.46	A
ATOM	1111	N	GLN	232	-15.891	7.411	15.350	1.00	19.40	A
ATOM	1112	H	GLN	232	-16.107	7.560	14.394	1.00	15.00	A
ATOM	1113	CA	GLN	232	-16.920	7.509	16.389	1.00	21.07	A
ATOM	1114	CB	GLN	232	-18.132	8.234	15.804	1.00	23.55	A
ATOM	1115	CG	GLN	232	-17.792	9.709	15.687	1.00	28.60	A
ATOM	1116	CD	GLN	232	-17.625	10.200	17.102	1.00	33.66	A
ATOM	1117	OE1	GLN	232	-18.623	10.472	17.742	1.00	38.08	A
ATOM	1118	NE2	GLN	232	-16.380	10.254	17.596	1.00	33.41	A
ATOM	1119	HE21	GLN	232	-15.596	10.186	16.972	1.00	15.00	A
ATOM	1120	HE22	GLN	232	-16.387	10.470	18.576	1.00	15.00	A
ATOM	1121	C	GLN	232	-17.402	6.148	16.851	1.00	21.86	A
ATOM	1122	O	GLN	232	-17.368	5.218	16.052	1.00	21.58	A
ATOM	1123	N	PRO	233	-17.906	6.013	18.115	1.00	22.31	A
ATOM	1124	CD	PRO	233	-17.962	7.033	19.168	1.00	21.41	A
ATOM	1125	CA	PRO	233	-18.570	4.747	18.442	1.00	21.21	A
ATOM	1126	CB	PRO	233	-19.013	4.987	19.866	1.00	23.88	A
ATOM	1127	CG	PRO	233	-18.661	6.404	20.339	1.00	20.95	A
ATOM	1128	C	PRO	233	-19.667	4.417	17.434	1.00	23.66	A
ATOM	1129	O	PRO	233	-20.275	5.319	16.875	1.00	26.89	A
ATOM	1130	N	GLY	234	-19.731	3.140	17.059	1.00	22.77	A
ATOM	1131	H	GLY	234	-19.082	2.466	17.417	1.00	15.00	A
ATOM	1132	CA	GLY	234	-20.766	2.767	16.072	1.00	19.45	A
ATOM	1133	C	GLY	234	-20.545	3.241	14.625	1.00	19.67	A
ATOM	1134	O	GLY	234	-21.299	2.980	13.715	1.00	23.81	A
ATOM	1135	N	ALA	235	-19.405	3.926	14.368	1.00	18.89	A
ATOM	1136	H	ALA	235	-19.096	4.485	15.135	1.00	15.00	A
ATOM	1137	CA	ALA	235	-18.431	3.515	13.296	1.00	22.17	A
ATOM	1138	CB	ALA	235	-18.193	2.042	13.039	1.00	6.68	A
ATOM	1139	C	ALA	235	-18.540	4.160	11.993	1.00	21.96	A

FIGURE 17T

ATOM	1140	O	ALA	235	-18.486	5.385	12.100	1.00	26.42	A
ATOM	1141	N	SER	236	-18.699	3.498	10.787	1.00	20.94	A
ATOM	1142	H	SER	236	-18.824	4.326	10.254	1.00	15.00	A
ATOM	1143	CA	SER	236	-18.630	2.227	9.961	1.00	17.60	A
ATOM	1144	CB	SER	236	-19.905	1.876	9.160	1.00	14.96	A
ATOM	1145	OG	SER	236	-20.662	0.908	9.833	1.00	21.35	A
ATOM	1146	HG	SER	236	-21.599	0.910	9.647	1.00	15.00	A
ATOM	1147	C	SER	236	-17.794	2.538	8.714	1.00	13.65	A
ATOM	1148	O	SER	236	-17.939	3.614	8.131	1.00	16.29	A
ATOM	1149	N	VAL	237	-16.986	1.567	8.286	1.00	14.95	A
ATOM	1150	H	VAL	237	-16.764	0.823	8.949	1.00	15.00	A
ATOM	1151	CA	VAL	237	-16.201	1.802	7.077	1.00	11.42	A
ATOM	1152	CB	VAL	237	-14.681	2.004	7.284	1.00	12.49	A
ATOM	1153	CG1	VAL	237	-14.113	0.726	7.939	1.00	13.10	A
ATOM	1154	CG2	VAL	237	-14.254	3.396	7.846	1.00	10.27	A
ATOM	1155	C	VAL	237	-16.468	0.746	6.035	1.00	8.76	A
ATOM	1156	O	VAL	237	-16.827	-0.363	6.341	1.00	12.84	A
ATOM	1157	N	PHE	238	-16.354	1.158	4.773	1.00	12.45	A
ATOM	1158	H	PHE	238	-16.139	2.128	4.652	1.00	15.00	A
ATOM	1159	CA	PHE	238	-16.521	0.213	3.653	1.00	11.21	A
ATOM	1160	CB	PHE	238	-18.013	0.137	3.322	1.00	13.00	A
ATOM	1161	CG	PHE	238	-18.634	1.468	2.899	1.00	12.17	A
ATOM	1162	CD1	PHE	238	-18.763	1.812	1.518	1.00	12.94	A
ATOM	1163	CD2	PHE	238	-19.135	2.332	3.887	1.00	10.55	A
ATOM	1164	CE1	PHE	238	-19.407	3.010	1.092	1.00	14.01	A
ATOM	1165	CE2	PHE	238	-19.786	3.504	3.470	1.00	12.74	A
ATOM	1166	CZ	PHE	238	-19.917	3.836	2.100	1.00	13.17	A
ATOM	1167	C	PHE	238	-15.725	0.582	2.379	1.00	11.20	A
ATOM	1168	O	PHE	238	-15.137	1.638	2.267	1.00	8.73	A
ATOM	1169	N	VAL	239	-15.726	-0.300	1.383	1.00	14.34	A
ATOM	1170	H	VAL	239	-16.187	-1.170	1.523	1.00	15.00	A
ATOM	1171	CA	VAL	239	-14.982	0.027	0.154	1.00	14.65	A
ATOM	1172	CB	VAL	239	-13.900	-1.043	-0.162	1.00	14.09	A
ATOM	1173	CG1	VAL	239	-13.004	-1.318	1.038	1.00	14.55	A
ATOM	1174	CG2	VAL	239	-13.064	-0.594	-1.361	1.00	14.74	A
ATOM	1175	C	VAL	239	-15.930	0.081	-1.043	1.00	18.32	A
ATOM	1176	O	VAL	239	-16.558	-0.903	-1.369	1.00	18.99	A
ATOM	1177	N	ASN	240	-16.000	1.207	-1.707	1.00	19.26	A
ATOM	1178	H	ASN	240	-15.420	1.947	-1.383	1.00	15.00	A
ATOM	1179	CA	ASN	240	-16.613	1.355	-3.031	1.00	21.66	A
ATOM	1180	CB	ASN	240	-16.850	2.856	-3.095	1.00	24.58	A
ATOM	1181	CG	ASN	240	-18.167	3.077	-3.708	1.00	29.09	A
ATOM	1182	OD1	ASN	240	-18.948	2.123	-3.740	1.00	35.44	A
ATOM	1183	ND2	ASN	240	-18.293	4.331	-4.166	1.00	34.71	A
ATOM	1184	HD21	ASN	240	-19.149	4.489	-4.657	1.00	15.00	A
ATOM	1185	C	ASN	240	-15.669	0.950	-4.184	1.00	20.96	A
ATOM	1186	O	ASN	240	-14.473	1.128	-4.058	1.00	20.99	A
ATOM	1187	N	VAL	241	-16.189	0.383	-5.275	1.00	21.52	A
ATOM	1188	H	VAL	241	-17.182	0.230	-5.295	1.00	15.00	A
ATOM	1189	CA	VAL	241	-15.387	0.439	-6.516	1.00	20.56	A
ATOM	1190	CB	VAL	241	-14.581	-0.850	-6.849	1.00	18.02	A
ATOM	1191	CG1	VAL	241	-15.501	-2.058	-7.063	1.00	15.06	A
ATOM	1192	CG2	VAL	241	-13.597	-1.259	-5.764	1.00	20.05	A
ATOM	1193	C	VAL	241	-16.253	0.758	-7.741	1.00	18.88	A
ATOM	1194	O	VAL	241	-17.441	0.500	-7.819	1.00	18.63	A
ATOM	1195	N	THR	242	-15.541	1.162	-8.762	1.00	21.24	A
ATOM	1196	H	THR	242	-14.704	1.653	-8.486	1.00	15.00	A
ATOM	1197	CA	THR	242	-16.246	1.476	-10.031	1.00	20.63	A
ATOM	1198	CB	THR	242	-15.342	2.269	-10.981	1.00	15.80	A
ATOM	1199	OG1	THR	242	-14.035	1.663	-10.953	1.00	17.72	A

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ATOM	1200	HG1	THR	242	-13.721	1.969	-11.812	1.00	15.00	A
ATOM	1201	CG2	THR	242	-15.238	3.732	-10.650	1.00	15.04	A
ATOM	1202	C	THR	242	-16.755	0.240	-10.783	1.00	18.92	A
ATOM	1203	O	THR	242	-17.846	0.198	-11.297	1.00	21.26	A
ATOM	1204	N	ASP	243	-15.923	-0.806	-10.718	1.00	20.98	A
ATOM	1205	H	ASP	243	-15.087	-0.580	-10.221	1.00	15.00	A
ATOM	1206	CA	ASP	243	-16.092	-1.977	-11.628	1.00	21.28	A
ATOM	1207	CB	ASP	243	-14.905	-2.126	-12.594	1.00	22.05	A
ATOM	1208	CG	ASP	243	-14.932	-0.954	-13.492	1.00	28.23	A
ATOM	1209	OD1	ASP	243	-14.314	0.051	-13.115	1.00	28.43	A
ATOM	1210	OD2	ASP	243	-15.588	-1.033	-14.535	1.00	33.00	A
ATOM	1211	C	ASP	243	-16.123	-3.308	-10.923	1.00	20.38	A
ATOM	1212	O	ASP	243	-15.148	-4.072	-10.967	1.00	20.43	A
ATOM	1213	N	PRO	244	-17.204	-3.553	-10.154	1.00	19.92	A
ATOM	1214	CD	PRO	244	-18.481	-2.871	-10.071	1.00	16.83	A
ATOM	1215	CA	PRO	244	-17.120	-4.706	-9.269	1.00	19.13	A
ATOM	1216	CB	PRO	244	-18.293	-4.535	-8.275	1.00	15.33	A
ATOM	1217	CG	PRO	244	-18.890	-3.174	-8.634	1.00	15.21	A
ATOM	1218	C	PRO	244	-16.975	-6.034	-9.974	1.00	19.29	A
ATOM	1219	O	PRO	244	-16.194	-6.859	-9.548	1.00	23.48	A
ATOM	1220	N	SER	245	-17.581	-6.163	-11.150	1.00	22.60	A
ATOM	1221	H	SER	245	-18.220	-5.459	-11.473	1.00	15.00	A
ATOM	1222	CA	SER	245	-17.414	-7.429	-11.942	1.00	25.50	A
ATOM	1223	CB	SER	245	-18.256	-7.369	-13.234	1.00	21.36	A
ATOM	1224	OG	SER	245	-19.667	-7.567	-12.981	1.00	38.26	A
ATOM	1225	HG	SER	245	-19.848	-7.390	-12.038	1.00	15.00	A
ATOM	1226	C	SER	245	-15.955	-7.776	-12.328	1.00	24.14	A
ATOM	1227	O	SER	245	-15.477	-8.859	-12.623	1.00	24.84	A
ATOM	1228	N	GLN	246	-15.177	-6.689	-12.385	1.00	28.52	A
ATOM	1229	H	GLN	246	-15.638	-5.804	-12.265	1.00	15.00	A
ATOM	1230	CA	GLN	246	-13.743	-6.923	-12.590	1.00	26.45	A
ATOM	1231	CB	GLN	246	-13.144	-5.645	-13.233	1.00	29.90	A
ATOM	1232	CG	GLN	246	-13.403	-5.435	-14.758	1.00	26.84	A
ATOM	1233	CD	GLN	246	-14.862	-5.341	-15.129	1.00	21.60	A
ATOM	1234	OE1	GLN	246	-15.538	-4.503	-14.616	1.00	24.20	A
ATOM	1235	NE2	GLN	246	-15.334	-6.234	-15.975	1.00	26.15	A
ATOM	1236	HE21	GLN	246	-14.763	-6.924	-16.423	1.00	15.00	A
ATOM	1237	HE22	GLN	246	-16.320	-6.119	-16.084	1.00	15.00	A
ATOM	1238	C	GLN	246	-12.936	-7.372	-11.363	1.00	27.14	A
ATOM	1239	O	GLN	246	-11.721	-7.570	-11.454	1.00	25.73	A
ATOM	1240	N	VAL	247	-13.615	-7.395	-10.196	1.00	23.70	A
ATOM	1241	H	VAL	247	-14.600	-7.594	-10.146	1.00	15.00	A
ATOM	1242	CA	VAL	247	-12.728	-7.569	-9.097	1.00	21.91	A
ATOM	1243	CB	VAL	247	-13.156	-6.814	-7.859	1.00	21.59	A
ATOM	1244	CG1	VAL	247	-14.027	-7.616	-6.962	1.00	24.52	A
ATOM	1245	CG2	VAL	247	-13.680	-5.409	-8.167	1.00	21.61	A
ATOM	1246	C	VAL	247	-12.258	-8.998	-8.910	1.00	21.55	A
ATOM	1247	O	VAL	247	-12.946	-9.912	-9.251	1.00	19.53	A
ATOM	1248	N	SER	248	-11.000	-9.152	-8.444	1.00	21.31	A
ATOM	1249	H	SER	248	-10.558	-8.342	-8.070	1.00	15.00	A
ATOM	1250	CA	SER	248	-10.414	-10.499	-8.327	1.00	21.97	A
ATOM	1251	CB	SER	248	-8.939	-10.571	-8.828	1.00	23.61	A
ATOM	1252	OG	SER	248	-8.860	-9.952	-10.128	1.00	20.21	A
ATOM	1253	HG	SER	248	-9.752	-10.027	-10.496	1.00	15.00	A
ATOM	1254	C	SER	248	-10.538	-11.076	-6.946	1.00	19.28	A
ATOM	1255	O	SER	248	-10.048	-10.409	-6.052	1.00	20.64	A
ATOM	1256	N	HIS	249	-11.269	-12.204	-6.814	1.00	18.72	A
ATOM	1257	H	HIS	249	-11.284	-12.753	-7.674	1.00	15.00	A
ATOM	1258	CA	HIS	249	-11.640	-12.673	-5.478	1.00	17.22	A
ATOM	1259	CB	HIS	249	-13.080	-13.152	-5.484	1.00	13.10	A

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ATOM	1260	CG	HIS	249	-13.919	-11.905	-5.550	1.00	10.13	A
ATOM	1261	ND1	HIS	249	-14.137	-11.129	-4.486	1.00	13.47	A
ATOM	1262	HD1	HIS	249	-13.720	-11.294	-3.611	1.00	15.00	A
ATOM	1263	CD2	HIS	249	-14.662	-11.414	-6.610	1.00	10.62	A
ATOM	1264	NE2	HIS	249	-15.317	-10.347	-6.134	1.00	15.51	A
ATOM	1265	CE1	HIS	249	-15.018	-10.142	-4.821	1.00	12.36	A
ATOM	1266	C	HIS	249	-10.701	-13.683	-4.858	1.00	23.58	A
ATOM	1267	O	HIS	249	-11.103	-14.729	-4.359	1.00	21.98	A
ATOM	1268	N	GLY	250	-9.398	-13.258	-4.878	1.00	29.10	A
ATOM	1269	H	GLY	250	-9.252	-12.351	-5.253	1.00	15.00	A
ATOM	1270	CA	GLY	250	-8.410	-14.041	-4.115	1.00	24.27	A
ATOM	1271	C	GLY	250	-8.336	-15.372	-4.743	1.00	25.93	A
ATOM	1272	O	GLY	250	-8.940	-15.520	-5.795	1.00	29.26	A
ATOM	1273	N	THR	251	-7.594	-16.302	-4.127	1.00	22.38	A
ATOM	1274	H	THR	251	-7.485	-17.038	-4.804	1.00	15.00	A
ATOM	1275	CA	THR	251	-7.111	-16.139	-2.725	1.00	21.12	A
ATOM	1276	CB	THR	251	-6.988	-17.525	-1.933	1.00	24.76	A
ATOM	1277	OG1	THR	251	-5.877	-17.641	-0.981	1.00	22.90	A
ATOM	1278	HG1	THR	251	-6.063	-18.366	-0.381	1.00	15.00	A
ATOM	1279	CG2	THR	251	-6.968	-18.722	-2.890	1.00	22.77	A
ATOM	1280	C	THR	251	-5.952	-15.158	-2.473	1.00	17.96	A
ATOM	1281	O	THR	251	-4.969	-15.043	-3.213	1.00	12.30	A
ATOM	1282	N	GLY	252	-6.241	-14.367	-1.419	1.00	16.85	A
ATOM	1283	H	GLY	252	-7.093	-14.432	-0.862	1.00	15.00	A
ATOM	1284	CA	GLY	252	-5.277	-13.375	-0.928	1.00	13.16	A
ATOM	1285	C	GLY	252	-5.357	-12.058	-1.670	1.00	15.51	A
ATOM	1286	O	GLY	252	-4.580	-11.168	-1.439	1.00	15.18	A
ATOM	1287	N	PHE	253	-6.189	-12.063	-2.744	1.00	16.66	A
ATOM	1288	H	PHE	253	-6.868	-12.805	-2.761	1.00	15.00	A
ATOM	1289	CA	PHE	253	-6.110	-10.892	-3.651	1.00	15.77	A
ATOM	1290	CB	PHE	253	-6.649	-11.216	-5.100	1.00	17.11	A
ATOM	1291	CG	PHE	253	-5.595	-11.840	-5.994	1.00	11.82	A
ATOM	1292	CD1	PHE	253	-4.385	-11.175	-6.231	1.00	13.69	A
ATOM	1293	CD2	PHE	253	-5.845	-13.089	-6.558	1.00	18.59	A
ATOM	1294	CE1	PHE	253	-3.364	-11.771	-6.993	1.00	14.39	A
ATOM	1295	CE2	PHE	253	-4.840	-13.680	-7.363	1.00	21.37	A
ATOM	1296	CZ	PHE	253	-3.612	-13.014	-7.562	1.00	15.72	A
ATOM	1297	C	PHE	253	-6.740	-9.599	-3.147	1.00	13.88	A
ATOM	1298	O	PHE	253	-6.347	-8.477	-3.453	1.00	14.27	A
ATOM	1299	N	THR	254	-7.865	-9.837	-2.502	1.00	14.00	A
ATOM	1300	H	THR	254	-8.079	-10.748	-2.124	1.00	15.00	A
ATOM	1301	CA	THR	254	-8.741	-8.681	-2.185	1.00	14.09	A
ATOM	1302	CB	THR	254	-9.908	-8.469	-3.201	1.00	11.66	A
ATOM	1303	OG1	THR	254	-9.414	-8.325	-4.536	1.00	13.08	A
ATOM	1304	HG1	THR	254	-9.826	-9.054	-4.992	1.00	15.00	A
ATOM	1305	CG2	THR	254	-10.882	-7.321	-2.885	1.00	13.78	A
ATOM	1306	C	THR	254	-9.270	-8.779	-0.738	1.00	12.36	A
ATOM	1307	O	THR	254	-9.906	-9.695	-0.240	1.00	14.54	A
ATOM	1308	N	SER	255	-9.007	-7.683	-0.027	1.00	13.42	A
ATOM	1309	H	SER	255	-8.425	-7.021	-0.490	1.00	15.00	A
ATOM	1310	CA	SER	255	-9.032	-7.725	1.431	1.00	7.59	A
ATOM	1311	CB	SER	255	-7.793	-8.466	1.976	1.00	6.39	A
ATOM	1312	OG	SER	255	-6.704	-7.560	2.041	1.00	9.69	A
ATOM	1313	HG	SER	255	-5.920	-8.031	1.741	1.00	15.00	A
ATOM	1314	C	SER	255	-9.248	-6.341	2.085	1.00	10.05	A
ATOM	1315	O	SER	255	-9.191	-5.254	1.492	1.00	15.21	A
ATOM	1316	N	PHE	256	-9.653	-6.385	3.369	1.00	8.54	A
ATOM	1317	H	PHE	256	-9.700	-7.323	3.733	1.00	15.00	A
ATOM	1318	CA	PHE	256	-10.114	-5.168	4.035	1.00	7.94	A
ATOM	1319	CB	PHE	256	-11.605	-5.009	3.679	1.00	11.65	A

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ATOM	1320	CG	PHE	256	-12.376	-3.824	4.235	1.00	8.72	A
ATOM	1321	CD1	PHE	256	-11.766	-2.570	4.533	1.00	11.20	A
ATOM	1322	CD2	PHE	256	-13.756	-3.976	4.327	1.00	6.12	A
ATOM	1323	CE1	PHE	256	-12.503	-1.490	5.034	1.00	11.49	A
ATOM	1324	CE2	PHE	256	-14.514	-2.849	4.734	1.00	6.86	A
ATOM	1325	CZ	PHE	256	-13.862	-1.657	5.211	1.00	9.27	A
ATOM	1326	C	PHE	256	-9.933	-5.268	5.560	1.00	11.92	A
ATOM	1327	O	PHE	256	-10.195	-6.290	6.177	1.00	9.43	A
ATOM	1328	N	GLY	257	-9.420	-4.207	6.169	1.00	10.57	A
ATOM	1329	H	GLY	257	-9.217	-3.365	5.653	1.00	15.00	A
ATOM	1330	CA	GLY	257	-9.368	-4.406	7.612	1.00	11.26	A
ATOM	1331	C	GLY	257	-8.965	-3.122	8.287	1.00	11.14	A
ATOM	1332	O	GLY	257	-8.916	-2.068	7.679	1.00	10.81	A
ATOM	1333	N	LEU	258	-8.688	-3.277	9.565	1.00	12.61	A
ATOM	1334	H	LEU	258	-8.776	-4.204	9.943	1.00	15.00	A
ATOM	1335	CA	LEU	258	-8.434	-2.098	10.426	1.00	14.72	A
ATOM	1336	CB	LEU	258	-9.751	-1.212	10.704	1.00	14.67	A
ATOM	1337	CG	LEU	258	-10.991	-1.863	11.379	1.00	18.02	A
ATOM	1338	CD1	LEU	258	-12.317	-1.125	11.094	1.00	15.05	A
ATOM	1339	CD2	LEU	258	-10.743	-2.047	12.905	1.00	15.42	A
ATOM	1340	C	LEU	258	-7.737	-2.525	11.709	1.00	11.84	A
ATOM	1341	O	LEU	258	-7.851	-3.690	12.096	1.00	7.91	A
ATOM	1342	N	LEU	259	-7.058	-1.537	12.343	1.00	11.64	A
ATOM	1343	H	LEU	259	-6.883	-0.685	11.844	1.00	15.00	A
ATOM	1344	CA	LEU	259	-6.581	-1.780	13.714	1.00	9.53	A
ATOM	1345	CB	LEU	259	-5.155	-2.417	13.831	1.00	7.40	A
ATOM	1346	CG	LEU	259	-4.194	-1.621	12.931	1.00	11.40	A
ATOM	1347	CD1	LEU	259	-3.355	-2.412	11.926	1.00	7.83	A
ATOM	1348	CD2	LEU	259	-3.379	-0.670	13.808	1.00	13.30	A
ATOM	1349	C	LEU	259	-6.652	-0.497	14.531	1.00	10.40	A
ATOM	1350	O	LEU	259	-6.202	0.556	14.082	1.00	9.73	A
ATOM	1351	N	LYS	260	-7.193	-0.629	15.762	1.00	12.00	A
ATOM	1352	H	LYS	260	-7.395	-1.553	16.115	1.00	15.00	A
ATOM	1353	CA	LYS	260	-7.069	0.521	16.693	1.00	13.51	A
ATOM	1354	CB	LYS	260	-8.014	0.312	17.885	1.00	13.49	A
ATOM	1355	CG	LYS	260	-8.378	1.656	18.521	1.00	17.16	A
ATOM	1356	CD	LYS	260	-9.435	1.456	19.596	1.00	12.01	A
ATOM	1357	CE	LYS	260	-10.151	2.681	20.121	1.00	11.41	A
ATOM	1358	NZ	LYS	260	-9.175	3.595	20.697	1.00	13.33	A
ATOM	1359	HZ1	LYS	260	-8.534	3.932	19.954	1.00	15.00	A
ATOM	1360	HZ2	LYS	260	-9.693	4.404	21.095	1.00	15.00	A
ATOM	1361	HZ3	LYS	260	-8.638	3.136	21.458	1.00	15.00	A
ATOM	1362	C	LYS	260	-5.648	0.921	17.125	1.00	16.54	A
ATOM	1363	O	LYS	260	-4.828	0.112	17.481	1.00	15.61	A
ATOM	1364	N	LEU	261	-5.353	2.199	17.015	1.00	14.78	A
ATOM	1365	H	LEU	261	-6.089	2.838	16.856	1.00	15.00	A
ATOM	1366	CB	LEU	261	-3.705	4.005	17.185	1.00	19.53	A
ATOM	1367	CG	LEU	261	-3.177	4.309	15.787	1.00	16.82	A
ATOM	1368	CD1	LEU	261	-3.010	5.779	15.767	1.00	12.45	A
ATOM	1369	CD2	LEU	261	-4.010	3.906	14.577	1.00	18.20	A
ATOM	1370	C	LEU	261	-4.243	2.667	19.225	1.00	20.80	A
ATOM	1371	OCT1	LEU	261	-5.363	2.741	19.746	1.00	22.59	A
ATOM	1372	OCT2	LEU	261	-3.221	2.696	19.913	1.00	26.97	A
ATOM	1373	CA	LEU	261	-4.122	2.604	17.684	1.00	18.13	A
ATOM	1374	O	HOH	501	-20.040	9.837	7.596	1.00	16.33	W
ATOM	1375	H1	HOH	501	-19.411	10.547	7.803	1.00	10.00	W
ATOM	1376	H2	HOH	501	-19.615	9.317	6.900	1.00	10.00	W
ATOM	1377	O	HOH	502	-9.727	11.545	10.743	1.00	10.94	W
ATOM	1378	H1	HOH	502	-10.039	11.934	9.919	1.00	15.00	W
ATOM	1379	H2	HOH	502	-10.233	12.125	11.315	1.00	15.00	W

FIGURE 17X

ATOM	1380	O	HOH	503	-8.158	13.188	13.681	1.00 30.64	W
ATOM	1381	H1	HOH	503	-8.715	12.529	13.277	1.00 15.00	W
ATOM	1382	H2	HOH	503	-8.700	13.944	13.574	1.00 15.00	W
ATOM	1383	O	HOH	504	-16.772	8.440	12.789	1.00 12.00	W
ATOM	1384	H1	HOH	504	-17.194	9.259	12.886	1.00 10.00	W
ATOM	1385	H2	HOH	504	-15.921	8.763	12.582	1.00 10.00	W
ATOM	1386	O	HOH	505	-25.173	7.297	7.925	1.00 47.03	W
ATOM	1387	H1	HOH	505	-24.690	8.064	8.239	1.00 10.00	W
ATOM	1388	H2	HOH	505	-25.990	7.684	7.583	1.00 10.00	W
ATOM	1389	O	HOH	506	-23.612	14.948	13.859	1.00 36.14	W
ATOM	1390	H1	HOH	506	-24.160	15.702	13.605	1.00 10.00	W
ATOM	1391	H2	HOH	506	-23.282	15.191	14.748	1.00 10.00	W
ATOM	1392	O	HOH	507	-17.329	-8.460	-7.186	1.00 34.02	W
ATOM	1393	O	HOH	508	-18.687	-7.253	-3.843	1.00 63.14	W
ATOM	1394	O	HOH	509	-7.157	11.327	3.239	1.00 22.26	W
ATOM	1395	O	HOH	510	-19.322	7.486	-2.227	1.00 37.69	W
ATOM	1396	O	HOH	511	-14.645	-7.711	-1.931	1.00 26.48	W
ATOM	1397	O	HOH	512	-18.377	-9.754	12.556	1.00 24.86	W
ATOM	1398	O	HOH	513	0.030	0.048	-13.455	1.00 26.05	W
ATOM	1399	O	HOH	514	-8.938	5.945	22.862	1.00 34.39	W
ATOM	1400	O	HOH	515	-29.446	-4.922	-7.247	1.00 41.61	W
ATOM	1401	O	HOH	516	-12.982	10.220	10.038	1.00 47.16	W
ATOM	1402	O	HOH	517	-21.797	-9.377	7.242	1.00 60.65	W
ATOM	1403	O	HOH	518	-7.867	8.165	19.484	1.00 40.46	W
ATOM	1404	O	HOH	520	-15.588	-14.701	14.628	1.00 63.80	W
ATOM	1405	O	HOH	521	-21.844	7.778	20.415	1.00 35.72	W
ATOM	1406	O	HOH	522	-6.555	-3.308	-15.790	1.00 33.63	W
ATOM	1407	O	HOH	523	-9.046	-13.476	-8.051	1.00 44.08	W
ATOM	1408	O	HOH	524	-17.413	-9.311	17.071	1.00 34.06	W
ATOM	1409	O	HOH	525	-23.838	4.781	19.884	1.00 37.99	W
ATOM	1410	O	HOH	526	-26.323	15.525	10.379	1.00 72.49	W
ATOM	1411	O	HOH	527	-3.167	-13.749	-10.820	1.00 43.99	W
ATOM	1412	O	HOH	528	-0.470	2.513	17.943	1.00 63.68	W
ATOM	1413	O	HOH	529	-5.580	-12.778	-14.864	1.00 47.52	W
ATOM	1414	O	HOH	530	-2.641	7.004	2.495	1.00 18.07	W
ATOM	1415	O	HOH	531	-6.472	12.847	0.156	1.00 24.96	W
ATOM	1416	O	HOH	532	-10.363	-16.426	-0.360	1.00 63.56	W
ATOM	1417	O	HOH	533	-1.378	-17.183	-13.053	1.00 67.67	W
ATOM	1418	O	HOH	534	-4.774	9.073	-0.651	1.00 23.36	W
ATOM	1419	O	HOH	535	-18.917	-13.857	6.913	1.00 32.28	W
ATOM	1420	O	HOH	536	-23.062	3.270	0.454	1.00 52.03	W
ATOM	1421	O	HOH	537	-25.906	9.022	16.986	1.00 44.75	W
ATOM	1422	O	HOH	538	-21.729	16.972	17.027	1.00 53.12	W
ATOM	1423	O	HOH	539	-9.084	11.806	17.034	1.00 70.90	W
ATOM	1424	O	HOH	540	-10.938	-13.296	15.207	1.00 35.65	W
ATOM	1425	O	HOH	541	-6.068	13.255	17.989	1.00 67.36	W
ATOM	1426	O	HOH	542	-20.593	-11.039	-9.003	1.00 96.30	W
ATOM	1427	O	HOH	543	-15.926	13.397	1.269	1.00 35.72	W
ATOM	1428	O	HOH	544	-24.591	-7.285	-2.353	1.00 43.42	W
ATOM	1429	O	HOH	545	-25.859	-2.666	-15.747	1.00 53.56	W
ATOM	1430	O	HOH	546	-23.074	-1.533	11.026	1.00 56.44	W
ATOM	1431	O	HOH	548	-8.941	-12.649	-12.394	1.00 64.34	W
ATOM	1432	O	HOH	549	-14.150	6.038	-12.250	1.00 41.38	W
ATOM	1433	O	HOH	550	-14.274	-0.613	18.441	1.00 56.17	W
ATOM	1434	O	HOH	551	-12.241	-19.609	8.637	1.00 80.90	W
ATOM	1435	O	HOH	552	-10.316	15.578	10.166	1.00 39.58	W
ATOM	1436	O	HOH	553	-15.367	10.941	14.659	1.00 40.40	W
ATOM	1437	O	HOH	554	-2.322	1.830	-5.294	1.00 33.65	W
ATOM	1438	O	HOH	555	-22.393	-14.875	-4.217	1.00 52.40	W
ATOM	1439	O	HOH	556	-22.120	14.279	7.189	1.00 38.55	W

FIGURE 17Y

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ATOM   1440  O   HOH   557     -28.833   6.135   9.560  1.00 37.40      W
ATOM   1441  O   HOH   558      -5.554 -16.509  13.192  1.00 88.88      W
ATOM   1442  O   HOH   559     -22.996  12.522   1.162  1.00 63.77      W
ATOM   1443  O   HOH   560     -13.764   2.268 -14.743  1.00 27.47      W
ATOM   1444  O   HOH   561     -15.556   7.750  -5.628  1.00 75.88      W
ATOM   1445  O   HOH   562      -1.970 -15.363 -17.719  1.00 76.30      W
ATOM   1446  O   HOH   563     -18.939  -0.335 -13.842  1.00 48.39      W
ATOM   1447  O   HOH   564     -12.619  14.760  -6.974  1.00100.59      W
ATOM   1448  O   HOH   565      -9.491  18.046  13.682  1.00 87.45      W
ATOM   1449  O   HOH   566     -11.655 -11.140  22.481  1.00 28.88      W
ATOM   1450  O   HOH   567     -24.072  -3.264  -0.332  1.00 35.13      W
ATOM   1451  O   HOH   568     -27.455   0.119  -7.117  1.00 71.07      W
ATOM   1452  O   HOH   569     -14.604   3.516  -6.119  1.00 59.45      W
ATOM   1453  O   HOH   570      -2.635  -9.566 -16.973  1.00 59.09      W
ATOM   1454  O   HOH   571     -18.841   4.066  -7.543  1.00 34.10      W
ATOM   1455  O   HOH   572     -24.996   1.301  17.953  1.00 70.45      W
ATOM   1456  O   HOH   573     -14.666  16.471   8.995  1.00 62.77      W
ATOM   1457  O   HOH   574     -14.786   1.426  10.949  1.00 82.68      W
ATOM   1458  O   HOH   575     -16.584 -14.717  -4.352  1.00 29.09      W
ATOM   1459  O   HOH   576     -16.273  -4.590   6.109  1.00104.64      W
ATOM   1460  O   HOH   577     -25.471  -0.127  -2.510  1.00 62.74      W
ATOM   1461  O   HOH   578      -7.334 -17.173  19.514  1.00 89.62      W
ATOM   1462  O   HOH   579     -21.060  14.259  19.996  1.00 69.59      W
ATOM   1463  O   HOH   580     -19.286   4.057 -12.816  1.00 60.37      W
ATOM   1464  O   HOH   581     -22.445 -15.840   0.317  1.00 58.24      W
ATOM   1465  O   HOH   582     -22.434 -10.539  12.489  1.00 70.25      W
ATOM   1466  O   HOH   583     -21.327   3.668  -2.500  1.00 39.32      W
ATOM   1467  O   HOH   584     -25.325   5.247  16.919  1.00 41.31      W
ATOM   1468  O   HOH   585     -24.945 -10.718  -2.375  1.00 38.85      W
ATOM   1469  O   HOH   586     -24.342 -13.003   1.927  1.00 70.58      W
ATOM   1470  O   HOH   587     -18.020  11.871  11.358  1.00 64.47      W
ATOM   1471  O   HOH   588     -27.135   6.965  13.151  1.00 53.96      W
ATOM   1472  O   HOH   589     -14.982 -16.230  -2.494  1.00 30.24      W
ATOM   1473  O   HOH   590      -5.646  14.418  -2.232  1.00 41.78      W
ATOM   1474  O   HOH   591      -2.745  -0.153 -17.104  1.00 55.19      W
ATOM   1475  O   HOH   592      -3.397  -7.012  22.477  1.00 59.46      W
ATOM   1476  O   HOH   593     -32.916  -4.705  -4.143  1.00 51.88      W
ATOM   1477  O   HOH   594     -10.913 -18.855  -3.503  1.00 42.29      W
ATOM   1478  O   HOH   595     -24.157   1.821  -6.165  1.00 47.43      W
END
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